

*At Mr. MARTIN's Shop, two Doors below
Crane-Court in Fleet-street,*

ARE sold all Kinds of Philosophical, Optical, and Mathematical Instruments, the most Part of which are either of his own Invention, or of a new Construction, and the Use of each Instrument rendered as general as the Nature of it will admit, being made according to a Philosophical and Mathematical Theory.

Note. Any Gentleman may be supplied with any such Goods at the most reasonable Prices, and sent with the utmost Safety and Expedition to any Part of *England*. He deals for Ready Money only.

Where may be had

Just Published, By B. MARTIN,

1. **T**HE Wonders of the COMETARY WORLD displayed, in five new Views of the Mundane System. With a true Elevation of the Orbit of the Comet of the Year 1744.

2. An Essay on VISUAL GLASSES, (Vulgarly called SPECTACLES) wherein it is shewn, from the Principles of OPTICS, and the Nature of the EYE, that the common Structure of those Glasses is contrary to the Rules of the Art, to the Nature of Things, &c. and very prejudicial to the Eyes; the Nature of Vision in the Eye explained, and Glasses of a New Construction proposed. The whole illustrated by a large Copper-Plate. By B. MARTIN. Price 6d.

3. PLAIN and FAMILIAR INTRODUCTION to the NEWTONIAN PHILOSOPHY, in six Sections, illustrated by SIX COPPER PLATES. Designed for the Use of such GENTLEMEN and LADIES as would acquire a competent Knowledge of this SCIENCE, without Mathematical Learning; and more especially those who have, or may attend the AUTHOR'S COURSE of SIX LECTURES and EXPERIMENTS on these Subjects. Price 4 s.

With His Majesty's Royal Licence and Protection,

This Day is Published,

In Four large Volumes OCTAVO,

Illustrated with above Three Hundred Copper-Plates, elegantly engraved, Price bound only Two Pounds Five Shillings, or bound in Eight Volumes, Two Pounds Eight Shillings,

(Containing as much in Quantity as any Work of the like Nature in two Volumes in Folio sold for *four Guineas*)

T H E
NEW and COMPLETE
D I C T I O N A R Y
O F
A R T S and S C I E N C E S ;

Comprehending all the Branches of
USEFUL KNOWLEDGE.

With accurate Descriptions as well of the VARIOUS MACHINES, INSTRUMENTS, TOOLS, FIGURES, and SCHEMES necessary for illustrating them, as of the CLASSES, KINDS, PREPARATIONS, and Uses of natural PRODUCTIONS, whether ANIMALS, VEGETABLES, MINERALS, FOSSILS or FLUIDS ; together with the KINGDOMS, PROVINCES, CITIES, TOWNS, and other remarkable Places throughout the WORLD.

The whole extracted from the best Authors in all Languages.

By a Society of GENTLEMEN.

Printed for W. OWEN in Fleet-street ; and sold by all other Booksellers in Great Britain and Ireland,

A N
INTRODUCTION
T O T H E
ENGLISH LANGUAGE
A N D
LEARNING.

In THREE PARTS.

PART I.

A SPELLING-BOOK of ARTS and SCIENCES;
Containing ALPHABETS of all the Words in the
following SCIENCES, *viz.*

THEOLOGY,	GEOGRAPHY,	PHYSIC,
ETHICS,	ASTRONOMY,	CHEMISTRY,
GRAMMAR,	ARITHMETIC,	PHARMACY,
RHETORIC,	ALGEBRA,	BOTANY,
LOGIC,	GEOMETRY,	JURISPRUDENCE,
POETRY,	MATHEMATICS,	HERALDRY.
MYTHOLOGY,	MECHANICS,	
PHILOSOPHY,	ANATOMY,	

Disposed in a METHOD entirely New;
With the Rules of *True Pronunciation* and *Spelling*.

PART II.

The RUDIMENTS of ENGLISH GRAMMAR.
With the RULES of ORTHOGRAPHY, CONSTRUCTION,
EMPHASIS, and a JUST ELOCUTION.

PART III.

LESSONS on all the above-mentioned Sciences;
Containing a particular Description of each, by Way
of EXERCISE, or PRAXIS, to enable the SCHOLAR to
read justly and judiciously on any Subject whatsoever.

To which is added,
A CATALOGUE of such Books in the *English* Language as
are proper to be read upon the *Liberal Arts and Sciences*.

By **BENJAMIN MARTIN.**

The THIRD EDITION.

L O N D O N:
Printed for W. OWEN, at *Homer's Head*, in *Fleet-street*.

MDCCLVII.

INTRODUCTION
TO THE
ENGLISH LANGUAGE
AND
LEARNING

Following is a list of the books in the
A. G. L. Book of Arts and Sciences

[illegible]

Disposed in a manner entirely new.

1887

The Russian Revolution

Lessons on all the above-mentioned topics

1. The first of these is the fact that the

A Catalogue of the Books in the
Library of the University of Toronto

BENJAMIN MARTIN 57-651

B L

Y. D. O.

1912-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-104

1012041

TO THE
M A S T E R S
O F
ENGLISH SCHOOLS,
AND
TUTORS of YOUTH
IN
PRIVATE FAMILIES,
IN
GREAT-BRITAIN and IRELAND.

GENTLEMEN,

AS the EDUCATION *of Youth*
is an Affair of the first
and greatest Concernment in Life,
your Profession ought to be
esteemed of the highest Merit,

DEDICATION.

and yourselves deserving of the truest Honour. To your Judgment I submit this *Essay towards facilitating the Knowledge of the English LANGUAGE and SCIENCES*; if it deserves your Approbation, I shall hope for its kind Acceptance; and that it may be useful to your Pupils, as a proper *Succedaneum* to common Spelling-Books. This will afford me the greatest Satisfaction and Pleasure, and be esteemed the highest Honour by, Gentlemen,

Your most respectful,

and humble Servant,

B. MARTIN.



THE P R E F A C E.

I HAVE long been persuaded, that nothing has been so much wanted in our *English* Schools as an *Introduction to the English Language and Learning*; since common Experience but too much evinces how little our Youth understand of either, after the first seven Years of the customary Education. An *English Grammar-School* is a Thing unheard of in our Nation; and it is a Notion that generally prevails, that in order to understand the *English* Language well, it is absolutely necessary to be first of all initiated into those of ancient *Rome* and *Greece*: But though we grant a Person, skilled in these Tongues, will more thoroughly perceive

ceive the Beauty, Elegance, and Energy of the *English* Tongue, it will by no Means follow, that he cannot have a proper and grammatical Knowledge thereof, independent of them, or any other whatsoever—Our Language, compounded and irregular as it is, does still admit of *Grammar*, and is subject to the *Rules of Construction*, as much as any other. And this must be attended to by every one who proposes to read, write, speak, or understand his own Language, in the least Degree of Perfection.

But *Grammar* is the only *one Thing* necessary; and were it to be found among our *English* Youth, (as very rarely it is,) it would, *alone*, be of little Service; for where is the great Advantage of knowing how to speak, unless a Person knew what to say? And this brings me to consider the Subject of *Reading* and *Discourse*; and at the same time to observe, that nothing has been more neglected in *English Education*, though it be the most *essential Part*. And here I shall take the Liberty of asserting, *that nothing less than a General Knowledge of the Nature, first Principles, Subjects, Parts, and Intention of the useful*

ful Arts and Sciences, and the peculiar Diction, or Phraseology belonging to each, can be sufficient to answer this Purpose compleatly. This is a self-evident Position; because, without such Knowledge, we cannot converse with Men of Learning, we cannot understand Books of Science, nor can we read or write properly, and with a good Grace, as every one knows by common Experience, and the voluntary Confession of such as are sensible of the Deficiency.

Now so far has all our Plans of *English Education* been from this, that we have scarce any Thing like it in our Schools; for all our Reading-Plans there, have been confined to the *Primer, Spelling-Books, New-Testament, and Bible*; the two first for learning the *Letters and Spelling*, and the two last for a *Common Praxis, or Exercise of Reading*.

As to the *Common Spelling-Books* in the Schools, I shall only observe, that, as they propose nothing more than a *vulgar Method* of Spelling, and the Pronunciation of *Common Words*, they are adapted in general to answer that End pretty well; though I have

found, by many Years Experience, that the usual Method they all pursue of putting all those Words together in Tables, that they are accented on the same Syllable, is a very bad one; for, as it obliges the Child to accent some Words *all one Way*, and some *all another*, it makes it very difficult for him to accent any Words *at all out of his Book*, as not remembring to which Class they severally belong, and having been used to no *general Rule*, or Method, independent of the Tables.

But what is most extraordinary in our vulgar Methods, of teaching to read in the Schools, is putting first the *New Testament* and then the *Bible* into the Hands of Children, to exercise their Abilities in this Respect; and when a Youth can mutter over a Chapter in the latter, full of hard Names, (as the Tenth of *Nehemiah* is the usual *Test*) he is then reputed a notable Proficient, and represented to his Parents, as the *Captain of the School*. This is the general Method of Schools, and has prevailed from Time immemorial; though with the least Reflection it will appear to be every Way insufficient, unnatural,

natural, and absurd, and certainly the most *prophane*, if not *impious* Way that possibly could be thought of, for instructing Youth in the *Art of Reading*. And indeed, I know of no other Instance, that shews so plainly, how *callous* our Minds may be rendered by Custom, and altogether insensible of Impressions from the most *interesting* and *sacred Principles* in Nature, *viz.* those of RELIGION, and the HAPPINESS of our Children.

When we consider the Books of the *New and Old Testament* as *Sacred Writings*, as containing the *Oracles of God*, as dictated by *Divine Inspiration*, as fraught with the *highest Mysteries*, and as intended solely for the *Instruction, and Perfection of our Understanding* in the *Sublime Notions and Doctrines of Religion and Revelation*; would it not appear an *amazing* Thing to any one but a *Christian*, to see these Writings made the *vulgar Praxis*, the *common Thesis* of *puerile Erudition* to every Child, to every *senseless Boy and Girl*, by every *old Woman* in *England*? Who does not know in what a religious and sacred Estimation the *Books of Rituals and religious Mysteries* are held by *Pagans*; what a peculiar

liar Veneration the *Koran* demands from the *Mahometans*; and how greatly the Writings of the *Old Testament* are revered, even by the *Jews* themselves? These all regard such Writings as the *Archives of Heaven*, the *Pandects of Divine Revelation*, and therefore Sacred to the *Priests* alone, and become their Province to explain and teach to the common People. And even here *Children*, and all *without Understanding*, were never looked upon as interested in such an Exposition. Such an high Regard for the sacred Name *JEHOVAH*, had the *Infidel Jews* that they suffered no Man to pronounce it but the *High-Priest*, and him only *once in a Year*, when in the *Sanctum Sanctorum*. But in *Protestant-Schools*, how is not only That, but all the other *Sacred Names of God*, and *Jesus Christ*, made the Subject of *childish Babbling*, and *School-dame Bawling*, every Hour of the Day! How are those *Scriptures of Truth*, those *written Laws of God*, (which God himself has so often enjoined us to *lay up in our Hearts*,) *torn to Pieces*, and *trampled under our Feet* while Children! How are those Writings, which were intended to give the greatest *Pleasure and Solace to the Mind*, often made the Cause of

bodily

bodily Pain and Wretchedness to Children! How are we *reproached* and *whipp'd* in our *Non-age*, for not being able to *read*, what should only *merit us Praise and Esteem* for *Understanding* when we are Men! And is it not extremely probable, that the *Book* we have so frequently bedrivelled, daubed, and pulled to Pieces at School, should become the Object of our future Indifference, Contempt, or Aversion? And may not the *Grounds of Deism*, and *Infidelity* in general, be very reasonably deduced from hence? And therefore, finally, may we not look upon this Custom of learning Youth to read by the *Holy Bible* an *absurd Profanation*, and the *most sordid Abuse* of the same?

Add to this the *Insufficiency* of such a Method, to answer any such End: Can a Child be supposed to *learn to read* by the *Testament* or *Bible*, where the Subject-Matter and the Design of the Book are of quite a contrary Nature? Is it not very preposterous to learn to *read without Understanding*, those very Books wick require to be *read with the greatest Understanding*? To pretend to acquire a Faculty of *reading easily*, by Books, which
of

of all others require the greatest *Art of Reading*, to be read at all well. But such is the Effect of Custom and inveterate Usage, and such the Weakness of human Nature, that *we suffer our Bibles to be prostituted unconcernedly* to a base and mercenary Interest, while we are persuaded it redounds greatly to the Good of our Children, and that they are by such a Method made *Christians* and *Scholars* at once. The general Consequence of all which is, that when our Youth are grown up, they appear such *hopeful Proficients*, that, whenever they read or indite, we seldom fail to *laugh* if they belong to others, or *blush* if they are our own.

As I have always looked on this Method with Abhorrence myself, I wondered it did not appear in the same Light to others; and consequently, that among the numerous Writers on this important Subject, why none had entered his Protest against it, and endeavoured to rectify so great an Abuse of our *English* Schools. Some indeed, of late, seem conscious of its Insufficiency, and have taken the laudable Pains to introduce a much better Method of initiating Children to read, and that

that is, by composing Lessons consisting of Words of one, two, three, and more Syllables, by which they are very properly exercised in reading on puerile Subjects; and as this is the only Way they can be taught to read at all, these must be allowed the only useful *Spelling-Books* now in our Schools, and will always be so, as they are founded on a necessary Plan.

But then, this is only a preliminary Article, or first Step towards the *Art of Reading* in the vulgar Ways; and much remains to compleat the extensive *Plan of general and genuine Education*, viz. such an one, as will enable a Person to *speak, read, and write, well and judiciously*, on every Subject that comes in his Way. Now such a Plan must consist of three Parts. *First*, that which may acquaint him with all the Words and technical Terms, peculiar to the Diction of every Art and Science, and by which he may know how to *divide* them in *Spelling*, and to *accent* them in *Pronunciation*; on this depends a just *Orthoe-py*, or *Elegance of Expression* in *Speaking* or *Reading*.

The *Second Part* is that, by which the Youth

of all others require the greatest *Art of Reading*, to be read at all well. But such is the Effect of Custom and inveterate Usage, and such the Weakness of human Nature, that *we suffer our Bibles to be prostituted unconcernedly* to a base and mercenary Interest, while we are persuaded it redounds greatly to the Good of our Children, and that they are by such a Method made *Christians* and *Scholars* at once. The general Consequence of all which is, that when our Youth are grown up, they appear such *hopeful Proficients*, that, whenever they read or indite, we seldom fail to *laugh* if they belong to others, or *blush* if they are our own.

As I have always looked on this Method with Abhorrence myself, I wondered it did not appear in the same Light to others; and consequently, that among the numerous Writers on this important Subject, why none had entered his Protest against it, and endeavoured to rectify so great an Abuse of our *English* Schools. Some indeed, of late, seem conscious of its Insufficiency, and have taken the laudable Pains to introduce a much better Method of initiating Children to read, and that

that is, by composing Lessons consisting of Words of one, two, three, and more Syllables, by which they are very properly exercised in reading on puerile Subjects; and as this is the only Way they can be taught to read at all, these must be allowed the only useful *Spelling-Books* now in our Schools, and will always be so, as they are founded on a necessary Plan.

But then, this is only a preliminary Article, or first Step towards the *Art of Reading* in the vulgar Ways; and much remains to compleat the extensive *Plan of general and genuine Education*, viz. such an one, as will enable a Person to *speak, read, and write, well and judiciously*, on every Subject that comes in his Way. Now such a Plan must consist of three Parts. *First*, that which may acquaint him with all the Words and technical Terms, peculiar to the Diction of every Art and Science, and by which he may know how to *divide* them in *Spelling*, and to *accent* them in *Pronunciation*; on this depends a just *Orthoepy*, or *Elegance of Expression* in *Speaking* or *Reading*.

The *Second Part* is that, by which the
Youth

Youth must be instructed how to form, or construct a Sentence from Words already known, in such a natural and proper Manner as may fitly express the Sentiments of his Mind in *Speaking* or *Writing*.

And the *Third Part* must consist of a proper and sufficient *Praxis*, for exercising the Scholar in the *Art of reading well*, on all Subjects indifferently.

And such a *Plan of English Education* I have here attempted, and now humbly offer to the Public. The whole is therefore divided into three great Parts, viz. *A Spelling Book of Arts and Sciences*; a compleat *English Grammar*; and a *brief Description of each particular Science*, for a *General Praxis* of Reading well, that is, with Judgment and Understanding.

The *SPELLING-BOOK* I have divided into three Sections; in the first of which I have collected all the Words of several Sciences, (such as are most generally read, and make the more polite Part of Literature) which are properly accented with single and double Accents; and disposed in proper Tables, according

The P R E F A C E.

xv

cording to their different Number of Syllables ; and not according to the *first, second, third, &c. Syllables*, on which the Accent lies, as is the usual Method, which I know to be a very bad one by many Years Experience. To this I have premised, what is necessary to the *Distinction of Letters*, the *Formation of Syllables*, the *Composition and Pronunciation of Words* in general ; but this is the least Part (if it may be properly said to be *any Part at all*) of the *Art of Spelling* ; for how can we suppose the Scholar can *learn to spell*, by Tables of Words already spelt to his Hand ? The *Art of Spelling* consists in being able readily to divide, or resolve any given Word into its proper Number of Syllables ; nor can a Youth do this, who has not been inured to it by a gradual Practice, and consequently the most essential Part of the Art of Spelling has been hitherto neglected and wanting.

To supply this Deficiency, the *Second Section* is added, in which the Words contained in the *Mathematical and Mechanical Sciences* are ranged in proper Tables ; I have made choice of these Sciences, as they are higher in the *System of Learning* than those of the *first Section*.

Section. The Words of this Section are not divided; but the Letters which terminate each Syllable in them, are appositely placed one after another upon the same Line with the Word, and in a proper Column by themselves; by which Means the Scholar will find it very easy to divide any Word of this Class into its proper Number of Syllables, by *Inspection* only, and without a Tutor. Thus by the Word *Parallelogram*, he sees the Letters *a, l, e, o*, which shews, there are five Syllables, and that the first ends with *a*, the second with *l*, the third with *e*, the fourth with *o*, and the fifth he knows of Course; and hence he can spell the Word as usual very readily, thus, *Pa-ral-le-lo-gram*; but this is so obvious and easy to every Reader, that it can require no farther Explication.

When the Scholar is arrived thus far, it is presumed, he will find himself able to spell any *Words* whatsoever by the Assistance of the Common Rules only; and to exercise him herein, I have subjoined the *third Section*, containing the Alphabets of *Anatomy, Physic, Pharmacy, and Botany*, as these Sciences abound with the most learned and technical Words in
our

THE PREFACE. xvii

our Language, most or all of them of a *Latin or Greek Derivation*; but chiefly the latter. To these the Rules of *Diastasis*, or True Spelling, are prefixed, with the Method of resolving Compound Words according to their proper *Etymology*.

After the Scholar is perfect in Spelling, the next Thing necessary is the Art of disposing these Words properly, in a Sentence, to express any Thought or Sentiment of the Mind, and make it intelligible to another Person in Speaking or Writing, and this is called GRAMMAR, which therefore compose the *Second Part* of this Work. As this is the most essential Part of *English Education*, I have taken the utmost Care to represent every Thing in a plain and familiar Manner, to his View, that relates to a just and genteel *Diction* for Youth, with Respect to both the great Parts of Expression, *viz.* ORTHOEPEY, and ORTHOGRAPHY. If the Scholar be duly instructed in this Part, he will have no Reason to be afraid to *Speak before,* or *write to* any Body. 'Tis true, there are many natural Accomplishments necessary to form an *Orator*, besides those acquired by Art, but with these a

Grammarian

Grammarian is not much concerned; his proper Business being the just *Construction and Rationale of Language*. A great deal might here be said, with respect to the Necessity every *English Youth* is under of accomplishing himself with the utmost Skill in the *Grammar of his own Tongue*; since in a *Gentleman*, it must be the highest *Opprobrium* not to be able to write or speak *correctly*, and with *Propriety*, his *Native Language*, which he has been *twelve, fifteen, or twenty Years in learning*. And indeed, what ought to give us a more *sensible Concern*, than to observe the Reluctance with which young People attempt to write or speak in Public, or even to write a Letter to their most intimate Friend? Nay, further, it is not seldom that we see a *Genius* buried in Obscurity, for not being able to communicate his excellent Sentiments in correct and proper Language; or, if they are prevailed on to write, they still stand in need of a Friend to *revise*, and make them *speak English*.

But supposing a Person knows *how to speak*, that is not sufficient; he would make but an awkward Figure, if he did not know *what to say* at the same Time; 'tis but rare we find a
 Person

The P R E F A C E. xix

Person can *spell well*: rarer yet, to find one that can *read well*; and still more rare, to find one that can *understand* what he does *read*; therefore the Third Part of this Work is added, for the sake of such as would be able to read well and judiciously on every Subject. In order to this, I have supplied him with a large *Praxis for universal Reading*, containing LESSONS on all the *Arts and Sciences* now in Use, and which ought to be known by every Person that makes the least Pretension to a *liberal Education*; and these Lessons are so contrived and designed, that the *Nature, Parts, and Purposes* of each Science, make the Subject of each; and all expressed in their peculiar *Phraseology* respectively; so that a Person cannot read here, but he must understand at the same Time; he cannot understand, but he must in a great Measure be able to converse with Mankind upon these Subjects, and in a proper Style and Diction. In short, such a *Puerile Encyclopædia* will be found of infinite Service, to form the Minds of Youth, and give them a Taste for liberal Sciences, and a Disposition to study them; for Knowledge always conciliates Affection to the Thing, as Ignorance produces Indifference and Aversion.

A Man

A Man of Science is naturally generous, humane, and polite; his Company easy, useful, and eligible, and all his Actions tend to a general Good; but the barren and uncultivated Mind shews the Man in a deplorable and shocking Contrast, susceptible of any Thing that is bad. The Seeds of Science, therefore, should be early sown in the Minds of Youth; and Parents must be adjudged guilty of Inhumanity to their Children, when they neglect to give them a *Scientific Education*. Nothing can be more astonishing, than to see how anxious they are in amassing *Wealth* for them, and at the same Time with what Indifference and Insensibility they suffer the *wretched Poverty* of their Minds! One would think, the Education of Children should be esteemed the most important Affair of Life, since all our future Fortune depends upon it; yet this does not in the least appear in our common Practice; we often see Children bred up without any Erudition at all: And though the Parents be in opulent Circumstances, yet they appear *Niggards* in nothing so much as the little Learning they bestow on their Children; if they purchase it, it must come very cheap; no Man is so ill paid as a *School-Master*; and indeed,

indeed, this is the general Reason why our Children go so long, and improve so little; and it would be a much more reputable, as well as successful Way, to pay a greater Price that the Master might attend on a less Number, and dispatch them in a much shorter Time. I know what it is to learn and to teach, and am well assured, that much more useful and solid Learning might be attained in half the Time that our Youth spend at Schools, if a better Method were taken and encouraged. I have endeavoured what I can towards it in a DICTIONARY, and this *Essay on a New Plan of English Education*; the former, I have the Pleasure to find, meets with Approbation and Preference from the best Judges; and I have little Doubt concerning the Success of the present Undertaking; since one Thing I am very clear in, viz. *that they who can read this small Treatise, may easily read any other*; and not only read, but read with *Judgment and Understanding also*, which is the principal Thing of all, and most wanted.

The Work is conducted in such a Manner, as not only to be adapted to the *public Use of Schools*, but also to the private Use of young Gentlemen and Ladies in Families; as there
are

are sufficient Instructions for the due understanding of every Part. I know, in short, of nothing farther that can be done, but compiling a Body of *Arts and Sciences* * at large.

* The Work here refer'd to, is now publishing monthly in the General MAGAZINE OF ARTS AND SCIENCES; but as it was judg'd necessary, we have added, in this Edition, a Catalogue of such Books as were thought most proper for the young Student to consult in the Course of his Studies, especially at his first setting out.



LEPSEL

A

SPELLING BOOK

OF

ARTS and SCIENCES.

SECTION I.

Containing the ALPHABETS.

I. Of THEOLOGY. III. Of MYTHOLOGY,
II. Of PHILOLOGY. IV. Of PHILOSOPHY.

*With the Rules of ORTHOEPEY, or true
Pronunciation.*

BEFORE I give the Rules of Pronunciation, I shall just observe, that in the Alphabet of Letters, we distinguish two Sorts, viz. *Vowels*, and *Consonants*; a *VOWEL* is a distinct and perfect Sound of itself; and of these we have Five, viz. *a, e, i, o, u*; and to these is usually added *y*.

All the other Letters are called *Consonants*; and here we distinguish two Sorts, *Mutes*, and *Semi-Vowels*; the *Mutes* are *b, c, d, g, j, p, q, t, v*; and are thus named, because they cannot be pronounced

B

without

without the Addition of a Vowel; as, *be, cee, dee,* &c. the *Semi-Vowels* are, *f, l, m, n, r, s, x, z,* so called, as yielding an imperfect Sound of themselves; but in this I think there seems to be a Mistake, as they cannot be sounded at all without a Vowel prefix'd; as, *ef, el, em,* &c.

Of these *Semi-Vowels*, Four are call'd *Liquids*, viz. *l, m, n, r*; because they flow very smoothly after a *Mute* in a Syllable; as in *glide, smile, gnaw, brute*; but they can't be sounded before a *Mute*, if a Vowel follow, as *rpo, ldi, mtu,* &c.

CONSONANTS are also distinguished into *Single* and *Double*. The *Single*, as *b, c, d, f,* &c. have but one simple Sound; whereas the *double*, or rather complex *Consonants*, as *w, x, z,* have plainly the Sound of two or more single ones in one; thus *w* is a Compound of *v u*; *x* is compounded of *ecs*, or *cs*; thus *vec* sounds *vecs*; and *z* has nearly the double Sound *dz*; as *Blaze* sounds *Bladze*; *Zion*, *dzion*, &c.

Of the VOWELS are form'd *Diphthongs*, or *Pairs*; as *au, eo, iu,* &c. or *Triphthongs*, of three; as *eau, ieu,* &c. A *Diphthong* is proper, when both *Vowels* are pronounced, as *ai*, in *fair*; *au*, in *Laud*; *ee*, in *Seed*; *oo* in *Food*; *oi* in *void*, &c. or improper, when only one is sounded, as the *e* in *ea*, *Tea*; the *i* in *ie*, *Fiend*; the *u* in *au*, *Eunuch*, &c.

Of the Letters in general are form'd SYLLABLES. A Syllable is a compleat Sound, or Expression of one, or more Letters in the same Breath or Tone; as, *a, ve, me*; *o, ti, ent*; and these, variously compounded, make all the different Kinds of Words in any Language; thus the above connected makes the Words *A-ve-me*, *G-ti-ent*, of three Syllables each.

A WORD, therefore, which expresses the Name, Action, Quality, or Manner of a Thing, is nothing more

OF ARTS and SCIENCES. 3

more than an Assemblage of Letters in Syllables. And if the Word consist of *one Syllable only*, it is called a *Monosyllable Word*, as *make, true, good, &c.* if of two *Syllables*, it is call'd a *Diffyllable*, as *e-ven, on-ly, wa-ter, &c.* All other Words are call'd *Poly-syllables*. And the Art of resolving Words into their true Number of Syllables, and in a just Manner, is call'd *DIASTASIS*, or the *Art of Spelling*; of which I shall give the Rules hereafter.

At present, I shall give the Rules for the right Pronunciation of Letters and Syllables, into which the Words stand divided in the following Tables of Arts and Sciences:

RULE I. The final (*e*) lengthens the Sound of the foregoing Vowel, as in *Can, Cane; Bed, Bede; Pip, Pipe; Rob, Robe; Tun, Tune.*

RULE II. The final (*e*) in Words ending in (*re*) is sounded before the (*r*) like *u*; as *Fire, Fi-ur, Desire, Desi-ur; Massacre, Massa-cur; Lucre, Lu-cur; Maugre, Mau-gur.*

RULE III. The *Latin Diphthongs*, *æ, œ*, are sounded like (*e*). As *Cæsar, Cesar; Phæbus, Phebus; Ætna, Etna; Oeconomy, Economy.*

RULE IV. Also the *English improper Diphthongs*, *ea, eb, and eu, ue* sound only the *e* and *u*; as *Tea, Te; Yeoman, Yeman; Feoffee, Feffee; Eunuch, Umuch; due, du; true, tru, &c.* sometimes *ra* sounds like *ee*; as in *People, Peeple; Feodary, Feedary.* Also *ea* has the same Sound in *Fear, near, appear, &c.*

RULE V. The Diphthong (*ie*) is sounded like (*e*) in *Cieling*; like (*eb*) in *Field*; and always like (*y*) at the End of Words, as *lie, signifie*; and *ei* is sounded like (*e*) in *Receipt, Deceit*; and sometimes like (*ai*) as in *Reign, feign, &c.*

RULE VI. The Diphthong (*æ*) at the End of Words, sounds like (*o*); as in *Toe, Foe, Doe, Sloe, &c.*

RULE VII. The Triphthong (*eau*) sounds like (*o*) in *Beau, Jet d'eau.* (*ieu*) sounds like (*u*) in *Lieu, Adieu,* and such other *French Words.*

RULE VIII. The Sound of (*c*) is hard before the Vowels *a, o, u*; as in *Cup, Cold, Call.* And sometimes before (*b*); as in *Chart, Chord, Cholic*; and before (*l*) and (*r*); as in *clear, creep.* It is otherwise generally soft; as *City, Cell, Cyder, Chuse, Child, Chosen, &c.*

RULE IX. In *French Words* (*ch*) is sounded like (*sh*), and the Vowel (*i*) like (*ee*); as in *Chagrin, Shagreen; Machine, Masheen; Chavalier, Shevaleur.* And sometimes like (*qu*) as in *Choir, Quire.*

RULE X. The sound of (*g*) is hard before *a, o, u, l, r*, as in *Gall, Go, Gun, Glean, Grope*; before (*ui*) it is always hard, as in *Guilt, Guild-hall*; also before (*b*), as in *Ghefs, Ghent, Ghost*; sometimes before (*i*), as in *Gibbons, Gibberish.* It is generally hard before (*e*), as in *get, Anger, longer, gear, geld,* except in *Latin Words*, as *Genus, Gender, generate, gentle, generous*; and in some *Greek ones*, as *Geometry, Geocentric, Genealogy, &c.* Two *gg's* are always hard; as *dogged, Dagger, aggravate, exaggerate, &c.*

RULE XI. The Sound of (*g*) when soft, before (*a*), (*o*), (*u*), is always expressed by the Consonant, or long (*j*) *Jay, Joy, Jude.*

RULE XII. The Letter (*b*) has a proper Sound in most Words, as *Heat, Hand, Howl, Hue, Hyde.* But in some it is nearly silent; as *Honour, Hour, Rhetoric, Rhine, &c.*

Of ARTS and SCIENCES. 5

RULE XIII. In any Part of a Word, the Sound of (*ph*) is (*f*); as *Philosophy*, *Paragraph*, *Phlegm*; also at the End of Words (*gh*) has the Sound of (*f*); as in *Cough*, *Laugh*, *enough*, &c.

RULE XIV. The hard Sound of (*c*) before (*i*) and (*e*) is expressed by (*k*); as, *Cit*, *Kit*; *Cent*, *Kent*, &c. This Letter is placed before no Consonant but (*n*), and is there often silent; as *Knave*, *know*, *Knack*, &c.

RULE XV. The Sound of (*qu*) at the End of our *French* Words is like (*k*); as in *Risque*, *Antique*, *Oblique*, *Barque*, *Cinque*, &c.

RULE XVI. The Syllable (*ti*) and (*ci*), if followed by a Vowel, sound like (*fi*) or (*bi*); as in *Fiction*, *Condition*, *Logician*, *Musician*.

RULE XVII. When (*cc*) occurs, the first is hard like (*k*), the other soft like (*s*); thus, *Siccity* sounds *Siksity*; *Flaccid*, *Flaksid*, &c.

RULE XVIII. The Letter (*p*) is not pronounced, at the Beginning of Syllables, before (*s*) and (*t*); as *Psalms* sounds *Salm*; *Pseudo*; *Psoas*; *Ptarmics*; *Ptolomy*; *Phthisic*; *Phthartics*; which are all Words of *Greek* Derivation.

RULE XIX. In the final Syllables (*ble*), (*cle*), (*ple*), &c. the (*e*) is sounded obscurely before the (*l*); as *able*, *Article*, *Principle*, &c.

RULE XX. In foreign Words the Final (*e*) makes a distinct Syllable, as in *Mau-re*, *Eu-ni-ce*, *Plo-ce*, *Hy-dro-ce-le*, *A-po-stro-phe*, *Si-mi-le*, &c.

RULE XXI. In *Greek* compound Words ending in (*oid*) or *oides*; the (*oi*) is not a Diphthong; thus *Cycloid*, *Cissoid*, *Choroides*, &c. are to be pronounced thus, *Cy-clo-id*, *Cis-so-id*, *Cho-ro-i-des*, &c.

RULE XXII. In *Greek* proper Names (*eu*) is a proper *Diphthong* and must not be divided in Pronouncing; as, *Atreus*, *Smyntheus*, *Ceneus*, *Theseus*, &c. are all but two Syllable Words.

C H A P. I.

Words of one Syllable.

THEOLOGY.

Chrism
Christ
Dean
Grace
Hymn
Jews
Nymph
Pope
Preach
Psalm
Rite
Schism
Soul
Theme
Tribe
Type
Zeal

PHILOLOGY.

Hymn
Mutes
Name
Noun

Rhyme
Scene
Scenes
School
Scribe
Tense
Trobe
Verb
Verse

MYTHOLOGY.

Baal
Bel
Fates
Fauns
Jove
Mars
Nox
Nymphs
Ops
Pan
Pax
Sol
Sphinx
Styx

Sun

PHILOSOPHY.

Air
Branch
Brutes
Cause
Chalk
Chasm
Chyle
Cloud
Fate
Flame
Form
Globe
Globe
Gust
Juice
Light
Mine
Mixt
Mode
Muse
Pain
Pores

Prone

Of ARTS and SCIENCES.

7

Prone
Pulse
Rare
Sage
Sense
Sound
Space
Sperm
Spiss
Surge
Tense
Tube
Tune
Void

COSMOGRA- PHY.

Arch
Ark
Back
Bay
Bear
Cape
Cor
Day
Earth
Globe
Great
Gulph
Height
Hour
Isle
Limb
Map
Mars
Mean

Month
Moon
Nodes
Orb
Place
Right
Scheme
Signs
Sol
South
Sphere
Stars
Sun
Time
Trine
True
Year
Zone

ARITHMETIC.

Cube
Gross
Like
Prime
Root
Rule
Square
Surd
Terms

GEOMETRY.

Arch
Arc
Bow
Chain

Charts
Chord
Cone
Coure
Crown
Cube
Guage
Hour
Legs
Like
Limb
Line
Log
Lunes
Mean
Plain
Plan
Plane
Point
Pole
Prime
Prism
Pure
Rhomb
Right
Ring
Rod
Rood
Rumb
Scale
Scheme
Sine
Sphere
Square
Style
Term

3 A SPELLING BOOK

MECHANICS.

Crown
Curve
Frame
Orb
Perch
Plane
Plumb
Scale
Screw
Scrue
Spring
Square
Swing
Wedge

ARCHITECTURE.

Band
Base
Bead
Beam
Bed
Brace
Breast
Crown
Dome
Drip
Dye
Die
Eaves
Face
Freeze
Freeze

Front
Fuft
Gorge
Hip
Hips
Isles
Lift
Niche
Nice
Orle
Peers
Plat
Plinth
Plinthe
Quoins
Scrowles
Scrolls

ANATOMY.

Bile
Blood
Bones
Brain
Breasts
Calx
Caul
Chyle
Cor
Death
Falx
Gland
Glans
Grume
Hair
Head
Heart

Lobe
Lungs
Mons
Mouth
Nails
Nerve
Nose
Parts
Pes
Phlegm
Pulse
Ribs
Skin
Skull
Splen
Teeth
Toes
Tongue
Valves
Vas
White
Wrist

PHYSIC.

Death
Dose
Flux
Gout
Grume
Heart
Pain
Piles
Probe
Pulse
Pus
Rheum

Rhithm

Of ARTS and SCIENCES. 9

Rhithm	Pills	Lobe
Spafm	Steel	Mofs
Zone		Plant
	BOTANY.	Root
PHARMACY.	Bark	Sap
	Bulb	Seed
Drachm	Chives	Shrub
Dram	Down	Sponge
Form	Fruit	Stalk
Gums	Gems	Style
Lute	Grain	Trees
Mace	Grass	Trunk
Musk	Juice	Tube
Myrrh	Leaves	Whirl.

C H A P. II.

Words of Two Syllables.

THEOLOGY.	Con'-cord	Eth'-nic
	Coun'-cil	Fan'-tasm
Ad-orè	Cu'-rate	Fan'-tome
An'-gels	Dea'-con	Fer'-vent
Af-sent	De-creè	Fer'-vour
Bap'-tism	Dè-ism	Fla'-grant
Bi'-ble	Dè-ist	Fù-ture
Can'-dour	De"-luge	Gen'-tiles
Can''-on	De-spair	Glò-ry
Cen'-sures	Di-vorce	Gno''-stics
Chap'-ter	Doc'-tor	Go''-spel
Chri'-soms	Doc'-trine	Ha-rangue
Cla'-mour	Dog'-ma	Hea'-then
Cler'-gy	Dru'-ids	Hè-brew
Col'-lects	E-lèct	Hor'-rour
Col'-lege	Es'-fence	I'-dol
Con'-clave	E'-thics	
		Jew'-ish

Jew'-ish
 Im-mense
 Im-merge
 Im-merge
 Im-plore
 In-cense
 In-dulge
 In-spire
 In-ter'
 In-voke
 Judg-ment
 Ju''-stice
 Lec'-ture
 Lè-gend
 Lè-vite
 Lòl-lards
 Mam'-mon
 Mar'-tyr
 Mau'-met
 Mer'-cy
 Me''-rit
 Mis'-sal
 Monk-ish
 Mo''-ral
 Mor'-tal
 Muf-ti
 My''-stic
 Nec'-tar
 Ni-cene
 O-bey
 Ob-scure
 Ob-struè
 Of-fence
 Of-fice
 O'-ral
 Or'-der
 Or-dain

Or'-phans
 Pæ'-an
 Pà-gan
 Pà-god
 Pà-pist
 Pà-pism
 Par'-don
 Par'-son
 Par'-ty
 Pas'-cal
 Pas'-cha
 Pà-stor
 Per'-sons
 Phan'-tom
 Pi'-ous
 Pi'-ty
 Pon'-tif
 Popè-dom
 Pray'-er
 Prè-bend
 Prè-cept
 Prè-sence
 Priest-hood
 Pri-mate
 Pri-or
 Pro-fane
 Pro''-mise
 Pro''-phet
 Pro''-strate
 Pro''-verbs
 Psalm-ist
 Psal-ter
 Pùl-pit
 Pù-rim
 Py'-thon
 Quà-kers
 Ràb-bi

Ràb-bin
 Ran'-som
 Rap'-ture
 Re-claim
 Rec'-tor
 Re-dèem
 Re-form
 Re-miss
 Re-morse
 Re-pent
 Re-tràct
 Ri''-gid
 Rò-man
 Rù-bric
 Sàb-bath
 Sanc'-tum
 Sà-tan
 Scàn-dal
 Scrip'-tures
 Se-duce
 Sè-lah
 Ser'mon
 Ser'-vice
 Sex'-ton
 Shè-kel
 Shì-lo
 Sin-cere
 Sò-ber
 So''-lemn
 Sor'-bonn
 Spi'-rit
 Spon'-sor
 Su-prème
 Sym'-bol
 Sy''-nod
 Sy''-stem
 Ta''-lent

Tar'-gum

Of ARTS and SCIENCES. 11

Tar'-gum
Tem'-ple
Tempt'-er
Tho'-mists
Thum'-mim
Trans-grèss
Trans-làte
Trans-pòrt
Tur'-cism
Vè-stry
Vi'-car
Ver'-tue
Vir'-tues
Vi''-fit
U'-rim
Zeà-lot
Zeal'-ous:

PHILOLOGY.

Ac'-cent
A-cùte
Ad'-verb
A'-pore
Ap'-tote
Cà-dence
Chò-rus
Clàs-fics
Co'-lon
Com'-ma
Com-pàre
Com'-plex
Com-pòse
Con-crète
Crà-fis
Cri''-tic
Cri''-tics

Dac'-tyle
Dà-tive
De-claim
De-cline
Diph'-thong
Dip'-tote
Dis-còurse
Di-spùte
Di''-stich
Dra''-ma
Ec'-logue
E''-pic
E''-pics
Ep'-ode
Fi''-gure
Flo''-rid
Fù-ture
Gen'-der
Gram'-mar
Hu-màne
Hy'-phen
Jar'-gon
Jè-june
In-vènt
Lan'-guage
La''-tin
Let'-ters
Li-bel
Lin'-guist
Li''-quids
Ly''-ric
Me''-thod
Mè-tre
Mi''-mic
Mot'-to
Neù-ter
Num'-ber

O'b-it
Ob-ligue
Pe''-dant
Per'-sons
Plu'-ral
Pò-em
Pò-et
Poi'-nant
Po-lite
Post'-script
Pò-sey
Prax'-is
Prè-cept
Prè''-face
Prè''-sent
Prò-em
Prò-logue
Prò-noun
Pro''-per
Pro''-verb
Rà-dix
Ro-mànce
Rù-ral
Sap'-phic
Sar'-casm
Sà-tyr
Scè'-nic
Schò'-lar
Sci'-ence
Sen'-tence
Ser'-mon
Spon'-dee
Sù-pines
Syn'-tax
Thè'-fis
Ti'-tle
Tmè'-fis
To''-pics

To"-pics
 Trà-gic
 Trans-pòse
 Trip'-tote
 Tro-chée
 Ver'-bal
 Ver-bòse
 Vo"-lume
 Vow'-el
 Ush'-er
 Zeug'-ma.

MYTHOLOGY.

Æ'-don
 Æl'-lo
 A'-jax
 Am'-mon
 A'-pis
 Ar'-gus
 At'-las
 Bac'-chus
 Bat'-tus
 Bè-lus
 Bron'-tes
 Cà-cus
 Cad'-mus
 Cæ'-nis
 Cà-stor
 Cen'-taurs
 Cè-res
 Cè-yx
 Chà-ron
 Chlò-ris
 Chì-ron
 Cìr-ce
 Clì-o

Clò-tho
 Cù-pid
 Cy'-clops
 Cy'-pris
 Cy'-re
 Dæ'-mon
 Da'ph-ne
 De'-los
 Dì-ræ
 Dò-ris
 E'-cho
 Flà-men
 Flò-ra
 For'-nax
 Gal'-li
 Gi'-ants
 Glau'-cus
 Gol'-den
 Gor'-gons
 Grà-cès
 Gy'-ges
 Hà-des
 Hàr-pies
 Hè-be
 Her'-mes
 Hè-roes
 He"-sper
 Hip'-pe
 Hò-rus
 Hò-ræ
 Hy'-as
 Hy'-las
 Hy'-men
 Jà-nus
 Jà-son
 I'-no
 I'-o

I'-phis
 I'-ris
 I'-fis
 I'-tys
 Jud'-ges
 Jù-no
 Là-res
 Lè-da
 Lè-næ
 Lè-the
 Lò-tis
 Lù-na
 Mà-nes
 Mà-vors
 Mem'-non
 Mè-na
 Men'-tha
 Mè-tra
 Mì-das
 Mì-nos
 Mò-mus
 Mor'-ta
 Mù-sès
 Myr'-rha
 Nai'-ades
 Nep'-tune
 Nes'-sus
 Nì-nus
 Nif'-sus
 Nò-na
 Nym'-phæ
 O'-pis
 Or'-cus
 Pœ'-an
 Pà-les
 Pà-las
 Par'-cæ

Pà-ris

Of ARTS and SCIENCES. 13

Pà'-ris
Pà'-vor
Per'-dix
Per'-seus
Phœ'-dra
Phœ'-bus
Pì-tho
Plei'-ades
Plà-to
Plù-to
Plù-tus
Pœ'-na
Pol'-lux
Prò-teus
Pyg'-mies
Pyr'-rha
Py'-thorn
Qui'-es
Rè-mus
Rhè-a
Sà-lus
Sà-tyrs
Sà-turn
Scyl'-la
Som'-nus
Stà-ta
Sthè-no
Suà-da
Sy'-rens
Sy'-rinx
Ter'-cus
Tè-thys
Thè-seus
This'-be
Tì-tans
Tri-ton
Ty'-phon

Vè-nus
Ve''-sper
Ve''-sta
Vir'-tus
Vul'-can
Xan'-thus.

PHILOSOPHY.

A-by'ss
A-cèrb
A''-cid
A''-cids
Ad'-der
A-dèpts
Ad-hère
Æ'-ther
Af-flux
A'-læ
Al'-gid
Al'-mond
Ant'-lers
A''-pex
Ar'-bor
Ar'-dor
Ar'-gil
A''-tom
A'-zure
Bo''-dy
Brà-fil
Brù-tal
But'-ter
Cal-cinè
Cà-lid
Cal'-lous
Cal'-low
Ca-niné

Car'-nose
Ca''-strate
Ca''-vern
Cau'-sal
Cau'-stic
Cau'-stics
Cè-rufs
Chà-os
Cho''-ler
Co-hère
Co''-lour
Co''-met
Com'-plex
Con-crète
Con-geal
Con'-tact
Con'-vex
Cor-ro'de
Crù-ral
De''-luge
De-scènt
De''-fert
Dis-crète
Di''-stance
Di-verse
Duc'-til
Ec'-cho
Ef-fe'ct
Ef-flux
E'-grefs
Ex-hàle
Ex-pànsè
Ex-pirè
Ex-trème
Fan'-tasm
Fà-tal
Fer-mènt

Fer'-tile

Fer'-tile	In-tensè	Pla''-stic
Fi-bres	Junc-ture	Plà-to
Fi-brous	Là-tent	Plè-nist
Fi''-gure	Lè-o	Pò-rous
Fi-nal	Leò-pard	Près-sur e
Fi-nite	Li''-mit	Pro''-blem
Fif-sure	Li''-quid	Pun'-gent
Flac'-cid	Lù-cid	Ra''-pid
Flà-tus	Lym'-pha	Rè-al
Flex'-ure	Mà-did	Reà-son
Flo''-rid	Mag'-net	Rè-flux
Flù-id	Ma-rinè	Re-fràct
Foun'-tain	Ma''-trix	Rè-gress
Flà-grant	Mat'-ter	Re-làx
Frù-men	Me''-tals	Re-sist
Fùl-gid	Mix'-ture	Re-spire
Fun'-gous	Moi'-sture	Ri-gor
Fù-file	Mon-soons	Ri''-ver
Gè-lid	Mon'-ster	Ro''-fin
Gè-nus	Mor'-tal	Rup'-ture
Ger'-mins	Mò-tive	Ru''-ral
Gìb'-bose	Moun'-tain	Sa''-line
Gib'-bous	Mun'-dane	Sà-pid
Glè-bous	Nà-ture	Sà-por
Glò-bule	Ni-tre	Sa''-vage
Ha''-bit	Ni-trous	Sà-vour
Hà-los	Nò-dose	Scà-brous
Hor'-rid	Nò-dous	Scèp-tics
Hor'-rour	Nur'-ture	Sci-ence
Hù-mid	Ob-liquè	Ser'-pent
Hù-mour	Oc-cult	Sim-ple
Ig'-nis	O'-dour	Sì-nus
Im-mense	O-paque	So''-lid
Im-pulse	Op'-tic	Som'-nus
In'-nate	Or'-gan	Spì'-rit
In'-sect	Pas'-sive	Splen'-dor
In'-stinct	Phy''-sics	Stag'-nant
		Stag-nate

Of ARTS and SCIENCES. 15

Stàg-nate
Strà-ta
Strùc-ture
Sùb-ject
Sùb-stance
Sùb-tile
Sùl-phur
Sur-face
Sù-ture
Sy"-stem
Tac-tile

Ter-rour
Tex-ture
Tò-paz
Tor-rent
Tù-mour
Tur-gid
Va-pour
Ve"-nom
Ver-dant
Ver-dure }
Ver-dour }

Vi"-scid.
Vi"-scous
Vi-tal
U-nite
Vò-cal
Vor"-tex
U-rine
U-vid
Vul-pine
Vul-ture
Zè-us.

C H A P. III.

Words of Three Syllables.

THEOLOGY.

Ac-ci-dents
A-dò-nai
An-ti-christ
A-po"-stle
Arch-àn-gel
Arch-bì-shop
Ar-ti-cle
A-the-ist
A"-va-riety
Au-then-tic
Be"-ne-fice
Bi"-ga-my
Bi"-go-tism
Blàs-phe-my
Ca"-ba-la
Ca"-ba-list
Cal-vi-nism

Ca"-lum-ny
Ca"-no-nize
Càn-ti-cles
Ca"-pi-tal
Ca"-ra-van
Car-di-nal
Car-me-lites
Ca"-te-chize
Ca-thè-dral
Cà-tho-lic
Ce-le"-stines
Cha"-ri-ty
Che"-ru-bims
Chì"-li-afts
Chri"-sti-ans
Cir-cum-vènt
Clè-men-cy
Col-lo-quy
Com-màn-d-ment

Con'-cu-bine
Con'-stan-cy
Cor'-po-ral
Co"-ve-nant
Dè-ca-logue
De-crè-tals
De"-di-cate
Dè-i-ty
De"-fti-ny
Dig"-ni-ty
Di-o-cess
Di-sci-ple
Di"-sci-pline
Dis-sen'-ter
Do"-cu-ment
Dog'-ma-tist
Dog'-ma-tize
Do"-na-tists
E"-pi-cure
E-pi"-stle

E-pi'-fite
 E-pist-ler
 E'-pi-taph
 E-tèr-nal
 E-ter-nize
 Eù-cha-rist
 Ex'-e-quires
 Ex'-or-cism
 Ex'-or-cist
 Ex'-or-cise
 Ex'-pi-ate
 Ex'-ta-cy
 Ex-ta'-tic
 Fal'-li-ble
 Fa"-mi-list
 Fa-na"-tic
 Fan-ta"-stic
 Fer'-ven-cy
 Fe"-sti-val
 For'-ma-list
 Func'-ti-on
 Fù-ne-ral
 Ge"-ne-sis
 Gen'-ti-lism
 Ge"-nu-ine
 Grà-ci-ous
 Heà-then-ism
 Hè-bra-ism
 Hèl-le-nist
 Ho"-lo-caust
 Ho"-mi-ly
 Hù-go-nots
 Ho-san'-na
 Hy"-po-crite
 Jan'-se-nism
 Je"-su-its
 Im-mor'-tal

Im'-pi-ous
 Im-por'-tance
 Im-po'-stor
 Im-po"-sture
 Im'-pre-cate
 In-dùl-gence
 In'-fa-mous
 In'-fa-my
 In-fèr-nal
 In'-fi-del
 In-hè-rent
 In'-no-cence
 In'-no-vate
 In"-sti-tutes
 In-tèr-pret
 In-tèr-ment
 Jù-bi-lee
 Ju-da-ize
 Ju"-sti-fy
 Lec'-tu-rer
 Li"-ber-tine
 Li"-ber-tines
 Li"-tur-gy
 Lù-ci-fer
 Lù-the-rans
 Mà-ho-met
 Ma"-jes-ty
 Ma-lig-nant
 Ma-ni-chèes
 Mar'-ri-age
 Mar'-tyr-dom
 Maù-me-try
 Me"-lo-dy
 Mef-si'-ah
 Mi"-ni-ster
 Mi"-ni-stry
 Mi"-ra-cle

Mi"-se-ry
 Mis-si-on
 Mo-nà-stic
 Mon'-ta-nists
 Mo"-ra-list
 Mo"-ra-lize
 Mo-sà-ic
 Mùs-sul-man
 My"-sta-gogue
 Na"-za-rene
 Na"-za-rite
 Nè-o-phite
 Nul'-li-fy
 Nul'-li-ty
 Nun'-ci-o
 Nup'-ti-al
 Ob-dù-rate
 Ob-jec'-tor
 Ob'-se-quires
 Ob'-sti-nate
 Ob'-stacle
 Of-fer-ing
 O"-ra-cle
 Or'-di-nance
 Or'-tho-dox
 O'-ver-ture
 Pa-ci"-fic
 Pa'-ga-nism
 Pà-pa-cy
 Pà-pi-stry
 Pa"-ra-ble
 Pa"-ra-dise
 Pa"-ra-dox
 Pa"-ra-graph
 Pa"-ra-phrase
 Pa"-ra-phrast
 Par'-son-age
 Par'-ti-al

Of ARTS and SCIENCES. 17

Par'-ti-al
 Par'-ti-fan
 Pàs-fi-on
 Pà-sto-ral
 Pa-tèr-nal
 Pa-the"-tic
 Pà-ti-ence
 Pà-tri-arch
 Pe"-ni-tent
 Pen'-ta-teuch
 Pen'-te-cost
 Per'-ma-nent
 Per'-ju-ry
 Per-se-verè
 Per-verf-ners
 Pè-fti-lence
 Pha"-ri-sees
 Pi-e-ty
 Pi"-te-ous
 Plà-ca-ble
 Plè-na-ry
 Po-le"-mics
 Pò-pe-ry
 Po"-fi-tive
 Prà-vi-ty
 Pre-cèn-tor
 Prè-di-al
 Près-by-ter
 Prè-sci-ence
 Pri-ma-cy
 Pri"-mi-tive
 Prin'-ci-ples
 Pri-o-ry
 Pro"-bi-ty
 Pro-fèf-for
 Pro"-phe-sy
 Pro-phè"-tic

Pro"-fe-lyte
 Pro"-te-ftants
 Prò-to-plaft
 Prò-to-type
 Prò-vi-dence
 Psàl-mo-dy
 Psàl-te-ry
 Pu"-bli-can
 Pù-ri-tans
 Pù-ri-ty
 Quà-ker-ism
 Quà'-ran-tain
 Qùi-et-ism
 Qùi-et-ists
 Rà-ma-dam
 Rè-con-cile
 Rec'-ti-tude
 Re-cù-fants
 Rec'-to-ry
 Re"-gif-ter
 Re-mon'-ftrants
 Re-pènt-ance
 Re"-prq-bate
 Rè-qui-em
 Re"-fi-dence
 Righ'-te-ous
 Ri"-tu-al
 Rò-ma-nift
 Rò-fa-ry
 Rù-di-ments
 Sa-bà-oth
 Sab'-ba-tism
 Sà-cra-ment
 Sà-cri-fice
 Sà-cri-lege
 Sa-cri"-ftan
 Sàd-du-ces

Sad'-du-cism
 Sanc'-ti-fy
 Sanc'-ti-on
 Sanc'-ti-ty
 Sanc-tò-rum
 San'-he-drim
 Sà-vi-our
 Scan'-dà-lous
 Schis'-ma-tic
 Scrip'-tu-rift
 Sec'-ta-ry
 Sè'-cu-lar
 Se-dù-cer
 Se-duc'-tive
 Sen'-fu-al
 Sen'-ti-ment
 Se-pùl-chre
 Se-pùl-ture
 Se-ra"-phic
 Se"-ra-phims
 Ser'-mo-nize
 Sî-mo-nift
 Sî-mo-ny
 Tre-mènd-ous
 Tri-bù-nal
 Tri"-ni-ty
 Tri-thè-ism
 Tri-thè-ists
 Ty"-pi-cal
 Vè-ni-al
 Vi"-ca-rage
 Vi"-ci-ous
 Vir'-tu-ous
 Vi"-fi-ble
 Vi"-fi-on
 Vi"-ti-ous
 Unc'-ti-on
 U"-ni-on

U`-ní-on

Vò-ta-ry

PHILOLOGY.

Ab`-la-tive

A-cro`-ftic

Ad`-jec-tive

A-do`-nic

Æ-go-la

Æ-nig-ma

Al-châ-ics

A`-na-gram

A`-na-paft

An`-gli-cism

An`-ti-thets

A`-pho-rism

A`-po-logue

A`-poph-thegm

A`-po-rime

A`-po-thegm

Ap`-to-ton

Ar`-cha-ism

Ar`-che-type

Ar`-ti-cle

A`-fteif-mus

A`-fte-ric

A`-fte-rism

At`-ti-cism

Aù-di-ence

Aug-men`-tum

Ba`-chi-us

Brè-vi-ty

Bu-co`-lics

Bu`-ftro-phe

Cœ-sù-ra

Cho-rè-us

Cir`-cum-flex

Col-lec`-tive

Co`-me-dy

Com`-i-cal

Con`-ju-gates

Con`-tra-ries

Cri`-ti-cal

Cri`-ti-cism

De-fec`-tive

Di-a-lect

Di-a-logue

Di-dac-tic

Di-gam-ma

Di-jam-bus

Di`-lo-gy

Dis`-pu-tant

Dra-ma`-tic

Dys`-pho-ny

Ec`-ba-sis

Ec-lip-sis

Ec`-ta-sis

E`-le-gance

E`-le-gant

E`-le-gy

El-lip-sis

E`-lo-quence

Em`-pha-sis

Em-pha`-tic

E-nal-lage

En-cli`-tics

En`-er-gy

E-nig-ma

E`-pi-cene

E`-pi-gram

E`-pi-logue

E`-pi-sode

E`-pi-taph

E`-pi-thet

E`-ty-mon

Eù-phe-mism

Eù-pho-ny

Flù-en-cy

Gal`-li-cism

Ge`-ni-tive

Glos`-sa-ry

Gra`-phi-cal

Grè-ci-an

Hè-bra-ism

Hèl-len-ism

He`-mi-ftich

He-rò-ic

Hex`-a-ftick

Hi`-fto-ry

Hù-ma-nift

Hy`-fte-ron

I-am`-bic

I-am`-bus

I-con-ism

I-dè-a

I`-di-om

I`-li-ads

Il`-la-tive

In-cep`-tive

I-o`-nic

I-ro-ny

Là-bi-al

Là-con-ism

Lamb-da-cism

La`-tin-ism

Lau-re-at

Lè-o-nine

Lex`-i-con

Lip`-to-tes

Li`-te-ral

Me`-ta-phor

Me`-ta-phraft

Me`-ta-plasm

Me`-tri-cal

Of ARTS and SCIENCES 19

Me"-tri-cal
Mi-mè-fis
Mif-nò-mér
Môn"-o-dy
Mo"-no-gram
Mo"-no-logue
Nar"-ra-tive
Nè"-ga-tives
No"-mi-nal
Nu"-me-rals
O"-be-lisk
Oc-tà-vo
Op-pò-nent
Op-ta"-tive
Or"-di-nals
O"-ri-gin
O"-ften-five
Pæ"-da-gogue
Pa"-ra-ble
Pa"-ra-digm
Pa"-ra-dox
Pa"-ra-graph
Pa"-ra-mour
Pà-ra-phrafe
Pà-ra-phraft
Par-el-con
Par"-o-dy
Par-ti-cle
Pa"-sto-ral
Pa-the"-tic
Pe"-dan-try
Pe-dan"-tic
Pen"-ta-stick
Pè-ri-od
Pè-ri-phrafe
Per"-so-nal
Pèr-suà-five

Phì-lo-math
Pin-da"-ric
Plè-o-nasm
Pò-e-sy
Pò-e-try
Pò-e-tes
Po-e"-tic
Po-e-tize
Po-le"-mic
Po"-ly-glott
Po"-fi-tive
Pos-sèf-fives
Pre-cèp-tor
Prè-ter-it
Pri"-mi-tives
Pro-lep"-tic
Pro-phà-fis
Pro"-so-dy
Prof-thè-fis
Pro-tà-fis
Pro-ta"-tic
Psàl-mo-dy
Rà"-di-cal
Re-dùn-dant
Re"-la-tive
Re-par-tèe
Rhap"-so-dy
Rhe"-to-ric
Rhyth"-mi-cal
Ro-man"-cist
Sar-ca"-stic
Sa"-ty-rise
Scan"-fi-on
Sce"-ni-cal
Scho-la"-stic
Schò-li-ast
Schò-li-um

Sci-o-list
Sin"-gu-lar
Spè-ci-es
Spe"-ci-men
Sub-junc"-tive
Sùb-stan-tive
Syl"-la-ble
Syl-lep"-fis
Sym-plò-ce
Syn-co-pe
Syn-chri-fis
Syn-des"-mus
Syn-op-fis
Syn-tag"-ma
Syn-the-fis
Sy"-sto-le
Tra"-ge-dy
Tra"-gi-cal
Tràn-si-tive
Ver-bà-tim
Ver"-fi-cle
Ver"-fi-fy
Ver"-fi-on
Vo"-ca-tive
Ut-te-rance

MYTHOLOGY.

A"-che-lous
A"-che-ron
A-chil-lis
Ac-tæ-on
A-dò-nis
Æ"-a-cus
Æ"-gè-on
Æ"-o-lus
A-glài-a
A-lec"-to

Am-phi-on

Am-phì-on	Cy-be`-le	I`-o-laus
An-tæ`-as	Dæ`-da-lus	I`-o-le
A-nù-bis	Dà`-na-e	I`-phi-cles
A-pol`-lo	De-ver`-ra	Ju-nò-nes
A-ràch-ne	Dry`-a-des	Jù-pi-ter
Ar`-go-nauts	Dry`-o-pe	Ju-vèn-tas
A-ftàr-te	E-dù-ca	Ix-i`-on
A-ftè-re-a	E-lec`-tra	La`-by-rinth
A-the`-na	E-rà-to	La-chè sis
A-trè-us	E-ryn`-nis	Lac-tù-ra
A`-tro-pas	Eu-rò-pa	Là-mi-æ
A-ver`-nus	Eu-tèr-pe	La-tò-na
Beel-zè-bub	Fe`-bru-a	La-ver`-na
Baal-zè-bub	Fer`-cu-lus	Le-mù-res
Baal-pè-or	Fe`-ru-la	Le-næ`-us
Be`-li-des	Flo-rà-les	Le-và-na
Bel-lò-na	For-tù-na	Leù-co-thoe
Bu-si-ris	Fù-ri-es	Li-bè-ra
Ca-bi-ri	Ga-làn-this	Li-gè-a
Cal-lis`-to	Ga`-ny-mede	Lim-nà-des
Ca-mœ`-na	Ge`-mi-ni	Lù-ci-fer
Ca-nò-bus	Gè-ni-i	Lu-ci-na
Ca-nò-pus	Ge-ry`-on	Lu`-per-cus
Cà-ti-us	Hal`-cy-on	Lu`-per-ca
Ce-lœ`-no	He`-ca-te	Lu-per`-ci
Ce`-pha-lus	He`-cu-ba	Ly-cà-on
Cer`-be-rus	He-lè-na	Mæ-nà-des
Cha-rì-tes	He`-li-con	Man-tur`-na
Chi-mæ`-ra	He-phœ`-ftus	Ma-tù-ra
Cly`-ti-a	Her`-cu-les	Ma-tù-ta
Cli-ti-e	He`-spe-rus	Mar`-fy-as
Co-cy`-tus	Hy`-a-des	Me-dè-a
Col-li-na	Hy-gèi-a	Me-dù-fa
Con-sen`-tes	I-ac`-chus	Me-gæ`-ra
Crò-ni-a	Ja`-ni-tor	Mel-lò-na
Cù-ni-a	I`-ca-rus	Mer`-cu-ry
Cu-re`-tes		

Me`-ro-pe

Of ARTS and SCIENCES. 21

Me"-ro-pe
 Me"-tro-a
 Mi-nèr-va
 Mi-no-taur
 Mor'-phe-us
 Mùl-ci-ber
 Mur'-ci-a
 Mu'-ti-nus
 Myr'-mi-dones
 Na-pæ'-æ
 Nar-cys'-fus
 Nà-ti-o
 Ne-mè-fis
 Ne-rè-us
 Nè-rei-des
 Ne-rì-o
 Nì-o-be
 Nix'-i-i
 No-dò-fus
 Nun'-di-na
 Oc-cà-tor
 OE"-di-pus
 Ô-re"-fles
 Or'-gi-a
 O-rì-on
 Or'-phe-us
 O-fi'-ris
 Pac-tò-lus
 Pa-læ'-mon
 Pan-dò-ra
 Pan-thè-on
 Par-nàs-fus
 Par-tun'-da
 Pe"-ga-fus
 Pè-li-as
 Pe-nà-tes
 Pen-thè-us

Phà-e-ton
 Phle"-ge-thon
 Phlè-gy-as
 Phòf-pho-rus
 Pì-e-tas
 Pi-lum'-nus
 Pì-rì-thous
 Po-mò-na
 Por-tum'-nus
 Po-sèi-don
 Po-tì-na
 Pri-à-pus
 Pro"-fer-pine
 Py"-ra-mus
 Py"-thi-a
 Qui-rì-nus
 Ro'-bi-gus
 Ro"-mu-lus
 Sà-li-i
 Se-lec'-ti
 Se"-me-le
 Se-mò-nès
 Sen'-ti-a
 Se-rà-pis
 Ser-và-tor
 Si-li-nus
 Si"-fy-phus
 Sta-tà-nus
 Ster'-li-o
 Ster-cù-tus
 Si"-mu-la
 Syl-và-nus
 Tà-di-ta
 Tan'-ta-lus
 Tel'-chi-nes
 Tem-pe"-fias
 Ter'-mi-nus

Tha-li-a
 Thy'-a-dos
 Ti-thò-nus
 Ti-ty'-us
 Và-cù-na
 Ve"-ri-tas
 Ver-tum'-nus
 Xè-ni-a
 Xè-ni-us
 Za'-gre-us
 Zè-phy-rus
 Zy'-gi-a

PHILOSOPHY.

A-bys'-mal
 Ac'-ci-dents
 Ac'-ti-on
 A"-da-mant
 Ad-èpt-ifts
 Æ"-ftu-ate
 A"-ga-ric
 A"-la-ry
 A"-li-ment
 A"-li-ture
 A"-ni-ma
 A"-pa-thy
 A-pe'r-ture
 A"-pho-ny
 Ap'-pe-tite
 A-quà"-tic
 A'-que-ous
 Ar'-bor-ift
 Ar-bù-ftine
 Ar-cà-num
 A-fbe"-ftine

A-sbe"-stine	Crà"-si-tude	Fri-a-ble
A-sphal"-tos	Cro"-co-dile	Fric"-ti-on
At"-mo-sphere	Crù-di-ty	Fùl-gen-cy
At-trac"-tive	Cùr-va-ture	Fùl-mi-nant
Aù-di-ble	Cùr-vi-ty	Fun"-da-ment
Au-rò-ra	Cù-ti-cle	Fù-si-ble
Bà-si-lisk	De"-cre-ment	Fù-si-on
Bdèl-li-um	Den"-si-ty	Ga"-lax-y
Bè-he-moth	Dù-ra-ble	Ge"-ne-rate
Be"-sti-àl	Ef-fec"-tive	Ge"-ni-tals
Bi-tù-men	E-la"-stic	Ger"-mi-nate
Cam-pe"-stral	E"-le-ment	Glan"-du-lous
Ca"-su-al	E"-le-phant	Glo"-bu-lar
Ca-ta-cly"-sme	E"-mi-nence	Glo"-bu-lous
Cà-ta-racts	E"-ner-gy	Glù-ti-nous
Ca"-vi-ty	En-gèn-der	Grà-vi-ty
Cèl-si-tude	En"-ti-ty	Gur"-gi-tate
Cha-mò-is	Ex"-crè-scence	Gut"-tu-lous
Chro-mà-tism	Ex-haùst-ed	Har"-mo-ny
Chry"-so-col	Ex-i"-stence	Hor"-ri-ble
Chry"-so-lite	Ex-o"-tic	Hy-ber"-nal
Clà-ri-ty	Ex-pùl-sive	Hy-è-mal
Co-a-lèsce	Ex-sic"-cate	I-dè-a
Cò-hè-rence	Fa"-cul-ty	I-dè-al
Con-den"-sate	Fan"-ta-sy	Ig-nè-ous
Con"-flu-ence	Fe"-cu-lent	Ig"-ni-fy
Con"-ge-ries	Fè-di-ty	Im-ma-tùre
Con"-glo-bate	Fe"-mi-nine	Im"-mi-nent
Con-fi"-stence	Fè-ri-ty	Im-mòr-tal
Con-fi"-stent	Fi"-la-ments	Im-pò-rous
Con-tex"-ture	Fla"-tu-lent	Im-prèg-nate
Con-tin"-gent	Flex"-i-ble	Im-pùl-sive
Cò-pu-late	Flex"-i-on	In"-ci-dents
Co-ra'l-line	Flù-en-cy	In-ci"-sure
Cor"-pus-cles	Flux"-i-on	In-cràs-fate
Cor-rò-sive	Frà-gran-cy	In"-cre-ment
Co-ru"-scant	Fran"-gi-ble	In-dènt-ed

Of ARTS and SCIENCES. 23

In-dènt-ed
In dù-rate
In-fèr-tile
In'-fi-nite
In'-flu-ence
In'-hè-rent
In-fi"-pid
In'-tel-lect
In-tèr-nal
In-tèr-val
In-te"-ffine
In'-tri-cate
Lac'-té-al
Lac'-té-ous
Lam'-ba-tive
La-mèl-læ
Là-ti-on
La"-ti-tude
Lax'-i-ty
Lè-o-nine
Le"-po-rine
Le"-vi-ty
Li"-qua-ble
Li"-qua-men
Lum'-bri-cal
Lù-mi-nous
Lù-te-ous
Mag-ne"-tic
Mag-ne"-tism
Mag'-ni-tude
Mar'-ca-site
Ma"-fcu-line
Mè'-cha-nism
Mè-di-um
Mè-ga-cosm
Mo'-li"-fic
Me"-mo-ry

Mè-phi-tis
Mer'-cu-ry
Me-ta'l-line
Mè-tal-lic
Mè"-tal-list
Mè-te-ors
Mi"-cro-cosm
Mi"-ne-ral
Mi"-ni-um
Mi"-ffi-on
Mo-dì-fic
Mò-li-ent
Mò-ti-on
Mu-gi-ent
Mù-gi-tus
Na"-tu-ral
Ne"-bu-lous
Nù-di-ty
Nù-tri-ment
Nù-tri-tive
O"-do-rous
O-pà-cous
Op'-ti-on
Or-ga"-nic
O"-ri-gin
Par'-ti-cle
Pàf-fi-ons
Pe"-li-can
Pèl-li-clé
Per'-me-ate
Per'-vi-ous
Pe-tri-fic
Phy"-fi-cal
Pla-to"-nic
Plè'-ni-tude
Prin'-ci-ple
Prò-ni-ty

Prò'-per-ty
Pro"-pa-gate
Prò-vi-dence
Prò-vi-dent
Pù-ber-ty
Pùl-fi-on
Pun'-gen-cy
Qua"-li-ty
Quàn-ti-ty
Quid-di-ty
Quin'-tel-sence
Rà-di-ant
Ra"-di-cal
Rà'-di-cate
Rà-ri-fy
Rà-ri-ty
Re"-do-lent
Re-flex'-ive
Re"-flu-ent
Re-frac'-tive
Re-fùl-gent
Re"-la-tive
Rè'-fi-nous
Re-sist"-ance
Rè'-fo-nant
Re-splen'-dent
Ri-fi-ble
Rù-mi-nant
Rup'-ti-on
Sà-ni-ty
Sà"-po-rous
Scà'-te-brous
Scep'-ti-cism
Sen'-fi-ble
Sen'-fi-tive
Sen'-fo-ry
Sen'-ti-ment
Sè-ri-es

Sè-ri-es
 Ser'-pen-tine
 Sig'-na-ture
 Si'-mi-lar
 Si-nu-ous
 Som-ni"-fic
 So"-no-rous
 Spè-ci-es
 Spe-ci"-fic
 Sper-ma"-tic
 Sphè'-ri-cal
 Spîf-fi-tude
 Spîf-ci-ty
 Sub"-til-ty
 Sùc-cu-lent
 Suc'-ti-on
 Sùf-te-nance
 Sym'-pa-thy

Sym'-me-try
 Syn'-the-fis
 Tac'-ti-on
 Tran'-fi-ent
 Trans-lù-cid
 Trans-ma-rinè
 Trans-pà-rent
 Tù-be-rous
 Tù-ni-cle
 Tu-me"-scence
 Tur-ge"-scence
 Và'-cu-um
 Và'-po-rous
 Vè-hi-cle
 Vè'-no-mous
 Vî-pe-rine
 Vî'-ru-lence
 Vî'-fi-ble

Vî'-fi-on
 Vî'-su-al
 Vî'-tre-ous
 Vî'-tri-fy
 Vî'-tri-ol
 Unc'-tu-ous
 U'-ni-corn
 U'-ni-form
 U'-ni-on
 U'-ni-verse
 Vo"-la-tiles
 U'-ri-nous
 Ur'-ti-cose
 U"-fti-on
 U'-te-rine
 Vul'-tu-rine
 Xi'-phi-as.

CHAP. IV.

Words of Four Syllables.

THEOLOGY.

A-dòp-ti-on
 Af-flìc-ti-on
 A-na-bàp-tism
 A"-ni-ma-ted
 An-ta"-go-nist
 Anx-i-e-ty
 An-ti"-qui-ty
 A-po"-ca-lypse
 A-po"-cry-phy
 A-po"-sta-sy
 Au-to"-lo-gy
 Àu-to-thè-ism
 Bap-ti-ste-ry
 Be-ne-dic-tines
 Be-ne"-fi-cence
 Be-ne-fac-tor
 Be-ne"-vo-lent
 Be-ne"-vo-lence
 Bre"-vi-a-ry
 Ca-no"-ni-cal
 Ca-te-chù-mens
 Ca-tho"-li-cism
 Ce"-li-ba-cy
 Cen-so-ri-ous
 Ce"-re-mo-nies
 Chì-o-man-cy
 Col-lè-gi-até
 Còm-men-ta-ry
 Còm-mis-sa-ry

Com-mù-ni-cant
 Com-mù-ni-on
 Còm-pe-ten-cy
 Con-cù-pi-scence
 Con-fès-si-on
 Con-fòr-mi-ty
 Con-fi"-sto-ry
 Còn-ti-nen-cy
 Còn-tro-ver-sy
 Còn-ven-ti-cle
 Con-vèr-si-on
 Cor-rèc-ti-on
 Di-a"-bo-lus
 Dig-ni-ta-ry
 Di-o"-ce-san
 Di-vi"-ni-ty
 Dog-ma"-ti-cal
 Do-mi"-ni-cal
 Do-mi"-ni-cans
 Dox-o"-lo-gy
 E"-bi-o-nites
 E-lèc-ti-on
 E-ly"-fi-um
 En-thù-fi-asm
 En-thù-fi-aft
 E"-pi-cù-rus
 E"-pi-cu-rism
 E-pi"-pha-ny
 E-pi"-sco-pal
 E-pi"-sco-pate
 E-rà-fti-ans

Ef-sèn-ti-als
 E-tèr-ni-ty
 E-tèr-na-lize
 E-vàn-ge-list
 E-vàn-ge-lize
 Eu-dòx-i-ans
 Eu-thà-na-sy
 Eu-ty"-chi-ans
 Ex-hòr-ta-tive
 Ex'-pi-a-ble
 Ex-pò'-fi-tor
 Ex-tèm-po-re
 Fa-cì-no-rous
 Fa-nà'-ti-cism
 Fe-lì-ci-ty
 Fe-fti'-vi-ty
 Fòr-mi-da-ble
 Fra-tèr-ni-ty
 Fri-gì-di-ty
 Fru-i'-ti-on
 Fun-da-mèn-tal
 Gè-o-man-cy
 Gra-tù-i-ty
 He-brì-ci-an
 Hè'-te-ro-dox
 Hex-à-me-ron
 Hì e-rar-chy
 Hy-pò'-cri-sy
 Hy-pò'-f-ta-fis
 Hy-po-ftà'-tic
 Hy-pò-the-fis
 I-dò'-la-tor
 I-dò'-la-trous
 Il-lù-mi-nate
 Il-lù-fi-on
 Im-mà'-cu-late
 Im-mèn-fi-ty

Im-mèr-fi-on
 Im-mòr-ta-lize
 Im-mù-ta-ble
 Im-pàr-ti-al
 Im-pèc-ca-ble
 Im-pè'-ni-tence
 Im-pè'-ni-tent
 Im-pi-e-ty
 Im-plà-ca-ble
 In-crè-du-lous
 In-cùl-pa-ble
 In-de-pèn-dants
 In-èf-fa-ble
 In-fal-li-ble
 In-fàn-ti-cide
 In-fir'-ma-ry
 In-î'-qui-ty
 In-i'-ti-al
 In-i'-ti-ate
 In'-no-và-tor
 In-qui'-fi-tor
 In-scrù-ta-ble
 In-strùc-ti-on
 In-tè'-gri-ty
 In-vi'-fi-ble
 I-rà'-sci-ble
 Ir-rè'-ve-rence
 Is'-ra-e-lites
 I-ti'-ne-rant
 Ju-dà-i-cal
 Knip-per-dòl-ings
 La-za-rèt-to
 Lè-gen-da-ry
 Le-vi-a-than
 Le-vi'-ti-cal
 Le-vi'-ti-cus
 Li-bi'-di-nous

Li-cèn-ti-ous
 Lù-the-ran-ism
 Ma-hò-me-tism
 Ma-lè-vo-lence
 Ma-li'g-nan-cy
 Ma-ni-chè-ans
 Mà-tri-mo-ny
 Me-di-à-tor
 Mi-ri''-fi-cal
 Mi''-se-ra-ble
 Mi-so''-ga-my
 Mò-na-ste-ry
 Mo-rà-li-ty
 Mor-tà-li-ty
 My-stè-ri-ous
 My-thò-lo-gist
 Nà-ti-o-nal
 Na-ti''-vi-ty
 Ne-cès-si-ty
 Nè-cro-man-cy
 Ne-stò-ri-ans
 Non'-con-for'-mist
 No' ti-o-nal
 No-và-li-ans
 O-bè-di-ence
 O-bè-di-ent
 Ob-jèc-ti-on
 Ob-là-ti-on
 Ob-li''-qui-ty
 Ob-li''-vi-on
 Ob'-sti-na-cy
 Ob-strùc-ti-on
 Œ-co-no''-mics
 Œ-co''-no-my
 Of-fer-to-ry
 Of-fi''-ci-ate
 O-mis-si-on

Om-ni''-po-tence
 Om-ni''-po-tent
 Om-ni-prè-sence
 Om-ni-prè-sent
 O-pi''-ni-on
 Op-près-si-on
 Op-pro'-bri-ous
 O-rà-cu-lar
 O-rà-ti-on
 O''-ra-to-y
 Or'-tho-dox-y
 Poe'-do-bàp-tism
 Par-œ''-ne-fis
 Par'-do-na-ble
 Pa-ro'-chi-al
 Pa-tri-arch'-ate
 Per-di''-ti-on
 Per-fec'-ti-on
 Per-mis-si-on
 Per-se-ve'-rance
 Per-spi''-cu-ous
 Per-swa'-si-on
 Per-ver'-si-ty
 Pi-a''-cu-lar
 Po-le''-mi-cal
 Pol-lù-ti-on
 Po-ly''-ga-mist
 Pon-ti''-fi-cal
 Pon-ti''-fi-cate
 Po-fi''-ti-on
 Pre-A'da-mites
 Pre''-ben-da-ry
 Pre-ci''-fi-an
 Pre-ex-ist'-ence
 Pres-by''-te-ry
 Pro-bà-ti-on
 Pro-cràs-ti-nate

Pro-fès-si-on
 Pro"-mif-so-ry
 Pro-pi"-ti-ate
 Pro-pi"-ti-ous
 Pro-spe"-ri-ty
 Pro"te-ftan-cy
 Pro"-te-ftan-tifm
 Prò-to màr-tyr
 Pro-vìn-ci-al
 Pfal-mo"-gra-pher
 Pfal-mo"-gra-phy
 Pfeud-àn-ge-list
 Pfeud-a-pò-ftle
 Pfeù-do-màr-tyr
 Pfeù-do-pro"-phet
 Pfy-cho"-lo-gy
 Punc-ti"-li-o
 Pùr-ga-to-ry
 Py-ro-man-cy
 Quin-ti"-li-ans
 Rab-bi"-ni-cal
 Ràb-do-man-cy
 Re-cù-fan-cy
 Rec-tò-ri-al
 Re-dèmp-ti-on
 Re-ge"-ne-rate
 Re-li"-gi-on
 Re-mif-fi-on
 Rhàb-do-man-cy
 Rìgh-te ouf-nefs
 Rì"-tu-al-ift
 Sa-bèl-li-ans
 Sa-cer-dò-tal
 Sa-cra-mèn-tal
 Sal-và-ti-on
 Sa-ma"-ri-tans
 Sanc-ti"-lo-quent

Sànc-ti-mo-ny
 Sànc-tu-a-ry
 Sa-ta"-ni-cal
 Schif-ma"-ti-cal
 Sec-tà-ri-an
 Se"-mì-na-ry
 Sèm-pi-tèr-nal
 Se"-pa-ra-tift
 Sèp-tu-a-gint
 Sim-pli"-ci-ty
 Sin-ce"-ri-ty
 So-brì-e-ty
 So-cì-e-ty
 So-cì"-ni-ans
 So-lèm-ni-ty
 So-li"-lo-quy
 Sò'-ve-reign-ty
 Spi"-ri-tu-al
 Sub-mif-fi-on
 Sub-òr-di-nate
 Su-pre"-ma-cy
 Sym-bo"-li-cal
 Sy-no"-di-cal
 Ta"-ber-na-cle
 Tal-mùd-i-cal
 Tèm-po-ri-fer
 Temp-tà-ti-on
 Ter-rè-ftri-al
 Tè-fti-mo-ny
 Tèx-tu-a-ry
 The-o"-lo-gy
 Tra-di"-ti-on
 Trans-grès-fi-ou
 Trans-là-ti-on
 Tri-sà-gi-um
 U-bi"-qui-ty
 Ve-fti-a-ry

Un-mèr-ci-ful
Un-rìgh-te-ous
Un-scrip-tu-ral
Vo-cà-ti-on

PHILOLOGY.

Ac-cù sa tive
Ae-nig-ma"-tic
A'l-le-go-rize
A'l-le-go-ry
Al-lù-fi-ons
A'm-phi-brà-chys
A'm-phi-mà-cer
A-na"-lo-gy
A-nàm-ne-fis
A-nan-coèi-on
A-na-pœ"-stic
A-na"-pho-ra
A-na"-stro-phe
A-no"-ma-lous
A-no"-ma-ly
An-te-cè-dent
An-ti"-lo-gy
An-ti"-phra-fis
An-ti-ptō-fis
An-ti-spa-stus
An-ti-stoi-chon
An-ti"-stro-phe
An-ti-the-fis
Aph-cæ'-re-fis
A-po"-co-pe
A-po" do-fis
A-po"-lo-gift
A-po"-lo gize
A-po" lo gy
A-pò-ri-a

A-po"-stro-phe
Ap-pèl-la-tive
A-sclè-pi-ad
A-sy'n-de-ton
Aù-di to-ry
Bat-to"-lo-gy
Bra-chy"-gra-phy
Bra-chy"-lo-gy
Bre-vi"-lo-quence
Ca-co"-pho-ny
Cal-li"-gra-phy
Ca-ra"-chre-fis
Cà-ta-chrè-stic
Cà-ta-lèc-tic
Ca-tà-sta-fis
Ca-ta"-stro-phe
Chò-ri-àm-bus
Co-mè-di-an
Com-pa"-ra-tive
Com-pa"-ri-son
Con-junc-ti-on
Con-struc-ti-on
Cryp-to"-gra-phy
Cryp-to"-lo-gy
De-clèn-fi-on
Dè-com-po"-sîte
De-fi" ci-ent
Di-oe"-re-fis
Di-a"-lo-gism
Di-a-ly'-ton
Di-a-noè-a'
Di-a"-sto-le
Di-a-sy'r-mus
Di-a-tri-ba
Di-a"-tri-be
Di-dac-ti-ca
Di-grès-si-on

30 A SPELLING BOOK.

Di-lù ci-date
 Di-mi"-ni-tive
 Di-spòn-de-us
 Di-thy-ràm-bic
 Dit-to"-lo-gy
 Dox-o"-lo-gy
 E-chò-i-cus
 Ec-phò"-ne-ma
 Ec-phò"-ne-fis
 Ef-flo-re"-science
 E"-le-gan-cy
 E"-le-gi-ac
 E-li"-fi-on
 Em-pha"-ti-cal
 En-cò-mi-um
 E-pa"-go-ge
 E-paux-è-fis
 E-pèn-the-fis
 E"-pi-lo-gize
 E-pi"-mo-ne
 E"-pi-phò-ra
 E"-pi-plèx-is
 E-pi"-plo-ce
 E-pi"-stro-phe
 E"-pi-tà-fis
 E-pi"-to-me
 E-pi"-tro-pe
 E"-pi-zeùx-is
 E-qui"-va-lent
 E-qui"-vo-cate
 E-qui"-vo-cals
 E-ro-tè-fis
 E-tho"-lo-gy
 Ex-cùr-fi-on
 Ex"-e-ge-fis
 Ex-è-di-um
 Ex-òr-di-um

Ex-tèm-po-re
 Fa-cùn-di-ty
 Fi"-gu-ra-tive
 Fre-quèn-ta-tive
 Gar-ri"-li-ty
 Glof-fo"-gra-phy
 Gram-mà-ri-an
 Gram-ma"-ti-cal
 Gran-di"-lo-quence
 Hen-dì-a-dis
 He"-te-ro-clites
 Hex-a"-me-ter
 Hex-ap'-to-ton
 Hì-e-ro-grams
 Hi-ftò-ri-an
 Hi-fto"-ri-cal
 Hi-stri-o"-nic
 Ho-mo"-no-my
 Hym-ni"-gra-pher
 Hy-pàl-la-ge
 Hy-pèr-ba-ton
 Hy-pèr-bo-le
 Hy-per-cri"-tic
 Hy-pèr-me-ter
 Hy-po"-bo-le
 Hy-po"-pho-ra
 Hy-po"-the-fis
 Hy-po-zeùg-ma
 Je-jù-ni-ty
 Il-là-ti-on
 Il-li"-te-rate
 I"-mi-ta-tives
 Im-pe"-ra-tive
 Im-pèr-so-nal
 In-chò-a-tive
 In-di"-ca-tive
 In-fi"-ni-tive
 In-tran'-

Of ARTS and SCIENCES. 31

In-tràn-fi-tives
 In-vèn-ti-on
 In-vèr-fi-on
 I-ò'-ta-cism
 I-rò'-ni-cal
 La-ti'-ni-ty
 Lep-tò'-lo-gy
 Lì-te-rà-ti
 Lì-te-ra-ture
 Lo-cù-ti-on
 Lon-gi'-lo-quy
 Lo-quà'ci-ty
 Mà-ca-rò'-nic
 Ma-crò'-lo-gy
 Mag-ni'-lo-quence
 Me-ta-lèp-fis
 Me-ta-noè-a
 Me-tà'-phra-fis
 Me-tà'-the-fis
 Mè'-to-no-my
 Mi-mi-àm-bus
 Mo-nòp-to-ton
 Mo-nò-fti-chon
 Mo-nò'-to-ny
 Mul-ti'-lo-quy
 Myc-te-rif-mus
 Nar-rà-ti-on
 Ne-gà-ti-on
 Nò-men-clà-tore
 Nò-mi-na-tive
 Ob-jèc-ti-on
 O-rà-ti-on
 O''-ra-to-ry
 O-ri-èn-tal
 O-rì'-gi-nal
 Or-thò'-gra-pher
 Or-thò'-gra-phy

Poe''-da-go-gy
 Pa-lin''-o-dy
 Pan-e-gy''-ric
 Pan-e-gy''-rist
 Par-æ'-ne-fis
 Pà'-ra-gò-ge
 Pà'-ra-gra-ph
 Pà'-ra-lip-fis
 Pa-rà'-the-fis
 Par-èc-ba-fis
 Par-èn-the-fis
 Pa-ro'e-mi-a
 Pà-roi-moi-on
 Par-rhè-fi-a
 Pàr-ti-ci-ple
 Pà-tro-ny''-mics
 Pau-ci''-lo-quy
 Pen-ta''-me-ter
 Pen-tàp-to-ton
 Pen-ùl-ti-ma
 Pe-ri''-me-ter
 Pe-ri''-phra-fis
 Per-sua-fi-on
 Per-sua-fo-ry
 Pha-lè-cr-an
 Phi-lo''-lo-ger
 Phì-lo-lo''-gic
 Phi-lo''-lo-gy
 Phi-o''-ma-thy
 Po-e''-ti-cal
 Po-et-à-fter
 Po-le''-mi-cal
 Po-ly''-lo-gy
 Po-ly''-lo-quent
 Po-ly'p-to-ton
 Po-tèn-ti-al
 Pre''-fa-to-ry

Pre-ter-pèr-fect
 Pro-èc-the-sis
 Pro-fi"-ci-ent
 Pro-lèp-ti-cal
 Pro-lix-i ty
 Pro-no"-mi-nal
 Pro-pri-e-ty
 Pro-sò-di-a
 Pro-sò-di-an
 Pro-to"-lo-gy
 Pro-to"-ly-pon
 Pro-vèr-bi-al
 Pseu-do"-lo-gy
 Quo-tà-ti-on
 Re-ci"-pro-cal
 Rhe-to" ri-cal
 Rhe-to"-ri-cate
 Sar-cà-sti-cal
 Sa-ty"-ri-cal
 Sè-mi-cò-lon
 So-li"-lo-quy
 Su-pèr-la-tive
 Syl-la"-bi-cal
 Syn-œ'-rè-sis
 Syn-a-læ'-pha
 Syn-cho-rè-sis
 Syn-èch-do-che
 Syn-o"-ny-ma
 Syn-o"-ny-mous
 Syn-o"no-my
 Tau-to"-lo-gy
 Tech-no"-lo-gy
 Tra-gè-di-an
 Tra"-gi-co"-mic
 Trans-là-ti-on
 Tri-fy'l-la-ble
 Tro-po"lo-gy

Ty-pò"-gra-pher
 Ty-po-gra"-phic
 Ty-po"-gra-phy
 Ty-ro"-ci-ny
 Ver-bo"-fi-ty
 Vèr-fi-fi-er
 Vo-lù-mi-nous

MYTHOLOGY.

Æ-scu-là-nus
 A-ga-mèm-non
 A-lèc-try-on
 Am-brò-fi-a
 A'm-phi-tri-te
 An-chi-là-us
 An-dro"-me-da
 A-ge-rò-na
 An-te-vèr-ta
 A-o"-ni-des
 A-phro-di-te
 A-re-thù-fa
 Ar-gen-ti-nus
 A-ri-ftœ'-us
 A-sca"-la-phas
 A-scò-li-a
 A-ver-rù-neus
 Bel-le"-ro-phon
 Be-re-ni-ce
 Bri-à-re-us
 Bru-mà-li-a
 Ca-dù-ce-us
 Cal-li-o-pe
 Caf-fi-o-pe
 Ca-fta"-li-des
 Ca-ftà-li-us
 Ca-ftà-li-a

Ci-thæ"-ri-des
Co-ry-bân-tes
Cy-pa-rêf-sus
Da-nà-i-des
Deu-cà-li-on
Do-mi-dù-cus
E-lò-i-des
E-ly"-fi-um
E-ly"-fi-an
En-dy"-mi-on
E-phi-âl-tes
E-tè-o-cles
Eu-me"-ni-des
Eu-phro"-sy-ne
Eu-ry'-a-le
Fa-bu-li-nus
Fe-rà-li-a
Fe-rò-ni-a
Fef-sò-ni-a
Flo-rà-li-a
Flu-vi-à-les
Ga-ny-mè-des
Har-po-crà-tes
He-li-a-des
He-spe"-ri-des
Hip-po-càm-pi
Hip-po-crè-ne
Hip-po"-ly-tus
Hip-po"-me-nes
Ho-nò-ri-us
Ho-fti-li-na
Hy-a-cìn-thus
Hy-me-næ'-us
I-a-pè-tus
Im-pe-rà-tor
In-di"-ge-tes
In-ter-dù-ca

Ju-ga-ti-nus
La-rà-ri-a
La-te-rà-nus
Le-mù-ri-a
Leu-cò-fi-a
Li-bi"-ti-na
Me-di-tri-na
Me-li-cèr-ta
Mel-po"-mo-ne
Mi-mal-lò-nes
Mi-nù-li-i
No-ven-si-les
Nu-bi"-ge-næ
Nu-mè-ri-a
Oc-cà-fi-o
O-cè-a-nus
O-cy"-pe-tæ
O-ly'm-pi-us
Of-fi-là-go
Pal-là-di-um
Par-the"-no-pe
Pa-si"-pha-e
Pa-tèl-li-na
Pa-vèn-ti-a
Pel-lò-ni-a
Pe-ne"-lo-pe
Pha-e-thù-fa
Phi-lo-mè-la
Pi-e"-ri-des
Po-ly-ni-ces
Po-ly-phè-mus
Po-ly'-xi-na
Po-ta"-mi-des
Pro-mè-thè-us
Pro-pœ"-ti-des
Pyg-mà-li-on
Quin-quà-tri-a

Re-di-cù-lus
 Re-mù-ri-a
 Rha-da-màn-thus
 Sal-mo'-ne-us
 Se-gè-ti-a
 Ter-pfi"-cho-re
 Ti-ra'-fi-as
 Ti-fi"-pho-ne
 Trip-to"-le-mus
 Tri-to'-ni-a
 Tu-tu-li-na
 Val-lè-ni-a
 Ver-gi"-li-æ
 Vi-ri-plà-ca
 Vir-gi-nèn-fis
 Vo-lù-pi-a
 U-rà-ni-a
 Vul-cà-ni-a

PHILOSOPHY.

Ac-ce"-le-rate
 A-clì'-vi-ty
 Ac-crè-ti-on
 A-cèr-bi-ty
 A-ci"-di-ty
 A"-cri-mo-ny
 A-da-màn-tine
 Ad-hè-fi-on
 A-è-ri-al
 Æ"-ftu-a-ry
 Æ-thè-re-al
 A"-ge-ra-fy
 A"-la-ba-fter
 A-la"-cri-ty
 Al-gi"-di-ty
 A-ma"-ri-tude

A-ma"-ru-lent
 Am-phi"-bi-ous
 An-ni-hi-late
 An-ti"-pa-thy
 A-por-rhè-a's
 Ap-pa-rà-tus
 Ap'-pe-ten-cy
 A-re"-nu-lous
 A-ri"-di-ty
 Ar-ti"-cu-late
 Ar-ti"-cu-lus
 A-spe"-ri-ty
 A-ftriç-ti-on
 A-tha"-na-fy
 At-te"-nu-ate
 At-tràç-ti-on
 At-tri"-ti-on
 A-vi"-di-ty
 Au-to"-ma-tic
 Bi-tù-mi-nous
 Ca-li"-di-ty
 Cal-lo"-fi-ty
 Ca-lo-ri"-fic
 Ca-mè-le-on
 Cà-me-lo-pard
 Ca-pa"-ci-ty
 Ca-pil-la-ry
 Car-ni"-vo-rous
 Car-no"-fi-ty
 Car-tè-fi-an
 Ca-ftirà-ti-on
 Ça"-fu-al-ty
 Ca-ta-ftà-fis
 Ca-tà-ftro-phe
 Cau-fa"-li-ty
 Ce-le"-ri-ty
 Ce-le"-fti-al

Of ARTS and SCIENCES. 35

Cef-sà-ti-on
 Cha-ly"-be-ate
 Co-a"-gu-late
 Co-hè-fi-on
 Col-li"-fi-on
 Com-bu"-fti-ble
 Com-bu"-fti-on
 Com-plè-ti-on
 Com-plèx-i-on
 Com-prèf-fi-ble
 Com-prèf-fi-on
 Com-pùl-fi-on
 Con-cà-vi-ty
 Con-cèp-ti-on
 Con-còc-ti-on
 Con-crè-ti-on
 Con-cùf-fi-on
 Con-dèn-fi-ty
 Con-di"-ti-on
 Con-gèal-a-ble
 Con-ge"-fti-on
 Con-glo"-me-rate
 Con-grù-i-ty
 Con-na"-tu-ràl
 Con-nèx-i-on
 Con-fti"-tu-ent
 Con-ftric-ti-on
 Con-sùmp-ti-on
 Con-tin-gen-cy
 Con-tù-fi-on
 Con-vèx-i-ty
 Co-o"-pe-rate
 Co-pèr-ni-can
 Cor-nè-li-an
 Cor-ni"-ge-rous
 Cor-pò-re-al
 Cor-pùf-cu-lar

Cor-rò-fi-on
 Cor-nip-ti-ble
 Cor-rùp-ti-on
 Cre-à-ti-on
 De-cli"-vi-ty
 De-cùf-fi-on
 De-cù-ti-ent
 De-flèc-ti-on
 De-flùx-i-on
 De-lè-ti-on
 De-li"-qui-um
 Den-dro"-lò-gy
 Den-ti"-ti-on
 De-prèf-fi-on
 De-tric-fi-on
 Di-a"-pha-nous
 Dif-cùf-fi-on
 Dif-pa"-ri-ty
 Dif-tèn-fi-on
 Dif-tòr-ti-on
 Dif-ù-ni-on
 Di-vèr-fi-ty
 Di-vi"-fi-on
 Do-ci"-li-ty
 Duc-ti"-li-ty
 Du-rà-ti-on
 Ef-fer-ve"-fcence
 Ef-fi-cà-cy
 Ef-fi"-ci-ent
 Ef-flù-vi-ums
 Ef-fù-fi-on
 E-gèr-mi-nate
 E-grèf-fi-on
 E-gùr-gi-tate
 E-jèc-ti-on
 E-lèc-tri-cal
 E"-le-phàn-tine

E-li"-

E-li"-fi-on
 E-mi"-fi-on
 E-mò-ti-on
 E-pi-cù-rus
 E"-pi-cu-rism
 E-qui"-vo-cal
 E-rèc-ti-on
 E-rò-fi-on
 E-rùp-ti-on
 E-và"-po-rate
 Ex-pàn-fi-on
 Ex-plò-fi-on
 Ex-tèn-fi-on
 Ex-tre"-mi-ty
 Ex-ù-be-rance
 Ex-ù-vi-æ
 Fa-ta"-li-ty
 Fe-cùn-di-ty
 Fer-rù-gi-nous
 Fer-ti"-li-ty
 Fla"-tu-len-cy
 Flu-i"-di-ty
 For-mà-ti-on
 Fra-gi"-li-ty
 Fri-cà-ti-on
 Fri-gi"-di-ty
 Fruc-ti"-fe-rous
 Fru-gi"-vo-rous
 Ful-gi"-di-ty
 Fu-li"-gi-nous
 Fun-go"-fi-ty
 Ge-li"-di-ty
 Gef-tà-ti-on
 Gib-bo"-fi-ty
 Gra-ci"-li-ty
 Gra-dà-ti-on
 Gra-mi"-ne-ous

Grand-e"-vi-ty
 Gra-ni"-vo-rous
 Gra-vi"-di-ty
 Gru-mo"-fi-ty
 Gu-ftà-ti-on
 Ha-li"-tu-ous
 He-li-a-cal
 Her-ma"-phro-dite
 Hu-mi"-di-ty
 Hy-po"-the-fis
 I-dèn-ti-ty
 Ig-ni"-fe-rous
 Ig-ni"-vo-mous
 Il-lù-mi-nate
 Im-ma"-ni-ty
 Im-mèn-fi-ty
 Im-mèr-fi-on
 Im-mi"-fi-on
 Im-pèr-vi-ous
 Im-pe"-tu-ous
 Im-près-fi-on
 In-àd-e-quate
 In-a"-ra-ble
 In-aù-di-ble
 In-ca-le"-science
 In-ca-le"-scent
 In-ci"-fi-on
 In-co-hè-rence
 In-còn-gru-ous
 In-còr-po-rate
 In-dò-ma-ble
 In-èr-ti-a
 In-èr-ti-tude
 In-fec-ti-on
 In-fi"-ni-ty
 In-flà-ti-on
 In-fràn-gi-ble

In-fù-fi-on
 In-jèc-ti-on
 In-nòx-i-ous
 In-sèr-ti-on
 In-tèl-li-gence
 In-tèn-fi-on
 In-tèn-ti-on
 In-ter-co"-stal
 In-ter-cùr-rent
 In-ter-flù-ent
 In-ter-jà-cent
 In-ter-mitt tent
 In-tri-ca-cy
 In-tù-i-tive
 In-tu-me"-fscience
 In-vèn-ti-on
 In-ve"-fti-gate
 In-ve"-te-rate
 In-vi"-fi-ble
 I-ra"-sci-ble
 Ir-rà-di-ate
 Ir-ri"-gu-ous
 Lác-ti"-fi-cal
 Lam-pà-di-as
 La-ni"-fe-rous
 La-ni"-ge-rous
 La-pi-de"-fcent
 La-trà-ti-on
 Len-ti"-gi-nous
 Li-qui"-di-ty
 Lu-bri"-ci-ty
 Lu-ci"-di-ty
 Lu-ci"-fe-rous
 Lù-mi-na-ry
 Ma-di"-di-ty
 Mag-ne"-ti-cal
 Mál-le-a-ble

Ma-tè-ri-al
 Ma-tù-ri-ty
 Me-cha"-ni-cal
 Me-dùl-la-ry
 Mel-là-ti-on
 Mel-li"-fe-rous
 Me-phi"-ti-cal
 Me-tàl-lur-gy
 Me-ta-mòr-phose
 Mi-cro"-gra phy
 Mi"-ne-ra-list
 Mo-bi"-li-ty
 Mo-da"-li-ty
 Mor-ta"-li-ty
 Mu-co"-fi-ty
 Mu-tà-ti-on
 Na"-tu-ra-list
 Ne cès-fi-ty
 Noc-ti-lù-ca
 No-do"-fi-ty
 Nu-ci"-fe-rous
 Nu-tà-ti-on
 Nu-tri"-ti-on
 Nu-tri"-ti-ous
 Ob-li"-qui-ty
 Ob-li"-vi-on
 Ob-nù-bi-late
 Ol-fác-to-ry
 On-to"-lo-gy
 O-na"-ci-ty
 Or-bi"-cu-lar
 Or-ga"-ni-cal
 O-vi"-pa-rous
 Paf-fi"-vi-ty
 Pe"-ne-tra-ble
 Phce-no"-me-non
 Phce-no"-me-na

Phi-lo"-so-pher
 Phi-lo"-so-phy
 Phi-lo-stòr-gy
 Phi-lo-tèch-nus
 Phy-ti"-vo-rous
 Phy-to"-lo-gy
 Po-mi"-fe-rous
 Po-ro"-fi-ty
 Po-si"-ti-on
 Pro-dùc-ti-òns
 Pro-fùn-di-ty
 Pro-pèn-fi-ty
 Py-tha"-go-ras
 Rà-di-an-cy
 Ra-pà-ci-ous
 Ra-pa"-ci-ty
 Ra-pi"-di-ty
 Rà-ti-o-nal
 Re-a"-li-ty
 Re-àc-ti-on
 Re-cùr-vi-ty
 Re-cùf-fi-on
 Re-flèc-ti-on
 Re-fràc-ti-on
 Re-fràn-gi-ble
 Re-fùl-gen-cy
 Re-là-ti-on
 Re-mis-fi-on
 Re-per-cùf-five
 Re-fi"-li-ent
 Re-splèn-den-cy
 Re-tèn-ti-on
 Re-vèr-be-rate
 Rhi-nò"-ce-ros
 Ro-tùn-di-ty
 Sa-gà-ci-ous
 Sa-ga"-ei-ty

Sal-fù-gi-nous
 So-po-ri"-fic
 Sa-tù-ri-ty
 Sca-tù-ri-ent
 Sen-sà-ti-on
 Se-re"-ni-ty
 So-ci-e-ty
 So-lì"-di-ty
 So-lù-ti-on
 Spe-ci"-fi-cal
 Spe"-cu-la-tive
 Spi-ri"-tu-ous
 Spon-tà-ne-ous
 Ste-ri"-li-ty
 Sub-stàn-ti-al
 Sub-ti"-li-ty
 Sùc-cu-len-cy
 Suc-cùf-fi-on
 Su-dà-ti-on
 Sul-cà-ti-on
 Suf-fù-fi-on
 Sul-phù-re-ous
 Suf-cèp-ti-ble
 Suf-pèn-fi-on
 Tèm-pe-ra-ment
 Tèm-pe-ra-ture
 Te-nà-ci-ous
 Te-na"-ci-ty
 Te-nù-i-ty
 Ter-rà-que-ous
 Ter-re"-strial
 Te-stà-ce-ous
 Ti-mi"-di-ty
 Trans-fù-fi-on
 Trans-pà-ren-cy
 Tre-pi"-di-ty
 Va-cù-i-ty

U-bi"-qui-ty
Ve"-ge-ta-ble
Ver-mi"-vo-rous
Ver-ti"-ci-ty
Vi-brà-ti-on
Vir-tu-ò-fo
Vif-co"-fi-ty
Vi-ta"-li-ty
Vi-ti"-fe-rous
Vi-tri-o-lic
Vi-vi"-pa-rous
U-li"-gi-nous
Ul-tra-mùn-dane

U-ni-còr-nous
U-ni-vèr-sal
Vo-li"-ti-on
Vo-ra'-ci-ous
Vo-ra"-ci-ty
Vo-ra"-gi-nous
U-vi"-fe-rous
Xò-chi-to-tle
Zo-o"-gra-phy
Zo-o"-gra-pher
Zo-o"-lo-gy
Zo-o"-phy-tes

C H A P. V.

Words of five Syllable.

Ab-ne-ga'-ti-on
Ab-so-lù-ti-on
Ac-cu-sa'-ti-on
Ad-o-ra'-ti-on
An'-thro-po-mèr-phites
Ca-ba-li"-fti-cal
Cà-lum-ni-à-tor
Cè'-le-bra'-ti-on
Cir-cum-ci"-fi-on
Com-mi-na'-ti-on
Con-dem-na'-ti-on
Con-fir-ma'-ti-on
Con-gre-ga'-ti-on
Con-fe-ra'-ti-on
Con-sub-ftan'-ti-al
Con vo-ca'-ti-on

Cru-ci-fix'-i-on
Dè'-ci-ma'-ti-on
De"-pre-ca'-ti-on
Deu te-ro"-ga-my
Deu-te-ro"-no-my
Di-a-bo"-li-cal
Dis-pen-sa'-ti-on
Di-vi-na'-ti-on
Ec'-cle-fi-a"-ftes
Ec'-cle-fi-à"-ftic
E-pi"-fcò-pa-cy
E-pi"-fto-la-ry
E-van-ge"-li-cal
Ex'-àl-ta'-ti-on
Ex'-hor-tà-ti-on
Ex-hòr-ta-to-ry

Ex'-pi-

E'x-pi-à-ti-on
 E'x-pi-a-to-ry
 E'x-pi-rà-ti-on
 E'x-po-fi"-ti-on
 Fu-tu-ri"-ti-on
 He"-te-ro-dox-y
 Hi-e-ràr-chi-cal
 Hi-e-ro-gly"-phic
 Hi-e-ro-gly"-phics
 Hi-e-ro"-gra-phy
 Ha-gi-o"-gra-phy
 Hy-po-cri"-ti-cal
 Hy-po-fta"-ti-cal
 Hy-pò-the"-ti-cal
 Il-lu-ftà-ti-on
 Im-ma-tè-ri-al
 Im-mo-là-ti-on
 Im-mor-ta"-li-ty
 Im-pe"-ni-ten-cy
 Im-po-fi"-ti-on
 In-car-nà-ti-on
 In-con-ceiv-a-ble
 In-con-fi"-de-rate
 In-con-sò-la-ble
 In-còr-ri-gi-ble
 In-cor-rùp-ti-ble
 In-dig-nà-ti-on
 In-dis-pèn-sa-ble
 In-è-fti-ma-ble
 In-e"-vi-ta-ble
 In-ex-cù-sa-ble
 In-ex-haù-fti-ble
 In-ex-ò-ra-ble
 In-èx-pi-a-ble
 In-èx-pi-ca-ble
 In-èx-tri-ca-ble
 In-fi-de"-li-ty

In-no-và-ti-on
 In-qui-fi"-ti-on
 In-spi-rà-ti-on
 In-ter-cèf-fi-on
 In-va-li"-di-ty
 In-vo-cà-ti-on
 Ir-re-li"-gi-on
 Ir-re-fi"-fta-ble
 Ir-re"-vo-ca-ble
 Ma-le-dic-ti-on
 Màr-ty-ro"-lo-gy
 Me-di-à-ti-on
 Me-di-tà-ti-on
 Me-ri-tò-ri-ous
 Me-tem-pfy"-cho-fis
 Mil-le-nà-ri-ans
 Mi"-ni-ftè-ri-al
 Mi"-ni-ftà-ti-on
 Mug-gle-tò-ni-ans
 My-tho-lo"-gi-cal
 Ni-co-là-ti-ans
 Ob-li-gà-ti-on
 Ob-li-gà-to-ry
 Op-por-tù-ni-ty
 Op-po-fi"-ti-on
 Pa-ra-bo"-li-cal
 Pa-ra-dòx-i-cal
 Par-ti-a"-li-ty
 Pe-ni-tèn-ti-al
 Per-se-cù-ti-on
 Per-so-na"-li-ty
 Per-spi-cù-i-ty
 Per-ti-nà-ci-ous
 Per-ti-nà"-ci-ty
 Per-tur-bà-ti-on
 Per-vi-cà-ci-ous
 Per-vi-ca"-ci-ty

Of ARTS and SCIENCES. 41

Pe-ſti-lèn-ti-al
Pha-ri-sà-i-cal
Phi-la-dèl-phi-ans
Pre-cog-ni"-ti-on
Pref-by-tè-ri-an
Pref-by-tè-ri-ans
Pri-ſcìl-li-a-niſts
Pro-bà-ti-o-ner
Pro-fa-nà-ti-on
Pro-hi-bi"-ti-on
Pro"-po-fi"-ti-on
Pro-vi-dèn-ti-al
Quàr-to-de"-ci-mans
Re-can-tà-ti-on
Re-for-mà-ti-on
Re-li"-gi-on-iſt
Re-no-và-ti-on
Re-pro-bà-ti-on
Re-fur-rèc-ti-on
Re"-ve-là-ti-on
Sab-ba-tà-ri-ans
Sa-cri-fi"-ci-al
Sa-cri-lè-gi-ous
Sanc-ti-mò-ni-al
Sen-fu-a"-li-ty
So-ci"-ni-a-niſm
So-l-i-fi"-di-an
Spi"-ri-tu-a-lize
Sti"-pu-là-ti-on
Su-per-ſti"-ti-on
Su-per-ſti"-ti-cus
Sup-li-cà-ti-on
Syn-a-go"-gi-cal
Tem-po-ra"-li-ties
The-o-lò-gi-an
To-le-rà-ti-on
Tra-di"-ti-o-nal

Trànſ-mi-grà-ti-on
Tràn-sub-ſtàn-ti-ate
Tri-ni-tà-ri-ans
Va-len-ti"-ni-ans
Vi"-fi-o-na-ry
Vi-fi-tà-ti-on
U"-ni-fòr-mi-ty
U"-ni-tà-ri-an
U"-ni-vèr-fa-liſts
Un-pàr-do-na-ble

PHILOLOGY.

A-brè-vi-a-ture
A-ca-ta-lèc-tos
A-ca-ta-lèc-tic
Æ-ti-o"-lo-gy
Al-le-go"-ri-cal
Am-bi-gù-i-ty
Am-phi-bo"-lo-gy
A-na-cæ'-no-fiſ
A-na-co-lù-thon
A-na-co-lù-thuſ
A-na-cre-òn-tic
A-na-di-plò-fiſ
A-na-gràm-ma-tiſm
A-na-gràm-ma-tiſt
Ant-a-na-clà-fiſ
An-ta-po"-do-fiſ
An-thy-po"-pho-ra
An-ti-bà-chi-uſ
An-ti-dàc-ty-luſ
An-ti-me"-tri-cal
An-ti-mè-ri-a
An-ti-pò-di-a
A"-po-di-òx-iſ
A-po"-lo-ge"-tic

Ap-pi-ca'-ti-on
 Ap-po-fi"-ti-on
 A-spi-ra'-ti-on
 Aux-i"-li-a-ry
 Ca-co-syn'-the-ton
 Com-bi-na'-ti-on
 Com-po-fi"-ti-on
 Con-ju-ga'-ti-on
 De-cla-ma'-ti-on
 De-cla"-ma-to-ry
 De-no"-mi-na-tives
 De-ri-va'-ti-on
 Di-a-lo-gis-mus
 Di-a-pho-ni-a
 Di-a-po-rè-fis
 Di-cæ-o"-lo-gy
 Dic-ti-o-na-ry
 Di-e-zeug'-me-non
 Di-la-ta'-ti-on
 Du-pi-ca'-ti-on
 Ef-flo-re"-scen-oy
 E-le-gi-a'm-bic
 E-lo-cù-ti-on
 En-an-ti-o-fis
 En-co-mi-a"-ftic
 Ep-a-na-tèp-fis
 E-pa-na"-pho-ra
 E-pan-òr-tho-fis
 E-pi-cè-di-um
 E-pi-gram'-ma-tift
 E-pi-my"-thi-um
 E-pi-ni"-ci-on
 E-pi-pho-nè-ma
 E-pi-fto-la-ry
 E-pi-ti-mè-fis
 E-tho-poè-i-a
 E-ti-o"-lo-gy

E-ty-mo"-lo-gift
 E-ty-mo"-lo-gize
 E-ty-mo"-lo-gy
 Ex-cla-mà-ti-on
 Ex-e-ge"-ti-cal
 Ex-er-ga'-fi-a
 Heph-the-mi"-me-ris
 Ho-moc-òp-to-ton
 Hy-per-bo"-li-cal
 Hy-per-cri"-ti-cifm
 Hy-po-ty"-po-fis
 Hy-ftè-ro"-lo-gy
 I-na-ni"-lo-quent
 In-ter-jec'-ti-on
 In-ter-punc'-ti-on
 In-ter-ro"-ga-tives
 Ir-re-fù-ta-ble
 Lex-i-co"-gra-pher
 Lu-cu-bra'-ti-on
 Ma-te-ò'-lo-gy
 Me-ta-phor"-i-cal
 Me-tø-ny"-mi-cal
 Mo-no-fyl-la-ble
 Mul-ti-nò-mi-al
 Or-tho-gra"-phi-cal
 Pa-ne-gy"-ri-cal
 Pa-ra-phra'-fti-cal
 Pa-ta-vi"-ni-ty
 Pen-thi-mi"-me-ris
 Pe-rif-so"-lo-gy
 Phi-lo-lo"-gi-cal
 Phra-fe-o"-lo-gy
 Po-ly-fyl-la-ble
 Po-ly-fyn'-de-ton
 Pre-po-fi'-ti-on
 Pre-ter-im-pèr-feèt
 Bre-ter-phu-pèr-feèt

Pro-e-pi-zeùx-is
Pro-po-si"-ti-on
Pro-so-po-pèi-a
Qua-dri-syl-la-ble
Re-pe-ti"-ti-on
Rhe-to-ri"-ci-an
Syn-a-thro-ès-mus
Syn-ech-pho-nè-fis
Syn-oè-ce-ò-fis
Ter-mi-nà-ti-on
Tra-gi-co"-me-dy
Trans-po-si"-ti-on
Vo-ca"-bu-la-ry

MYTHOLOGY.

A'-scrip-ti"-ti-on
Æ-scu-là-pi-us
A-ga-nip-pe-des
Am-ber-và-li-a
A-ge-rò-ni-a
A-pa-tù-ri-a
Bac-cha-nà-li-a
Com-pi-tà-li-a
Con-su-à-li-a
Di-o-ny"-fi-us
Di-o-ny"-fi-a
E-pi-læ-nè-a
E-rich-thò-ni-us
Ha-ma-dry"-a-des
He-li-co"-ni-des
Her-ma"-phro-di-tus
Hip-po-cre"-ni-des
Hy-a-cin-thi-a
I-phi-gè-ni-a
Le-mo-ni-a-des
Lu-per-cà-li-a

Ma-na-ge"-ni-ta
O-ce-à-ni-œ
Po-ly-hym"-ni-a
Qui-ri-nà-li-a
Ro-bi-gà-li-a
Sa-tur-nà-li-a
Thes-mo-phò-ri-a
Vi-o-lèn-ti-a

PHILOSOPHY.

A-cri-mè-ni-ous
A-do-lèf-cen-cy
A"-gi-tà-ti-on
A-li-mèn-ta-ry
Al-te-rà-ti-on
A"-ni-màl-cu-læ
A"-ni-mà-li-ty
An-thro-po"-lo-gy
An-thro-po"-pa-thy
An-thro-po" pha-gy
An-thro-po"-so-phy
Ap-pa-ri"-ti-on
A-p-po-si"-ti-on
A-re-fàc-ti-on
Af-pi-rà-ti-on
At-trac-tà-ti-on
Aug-men-tà-ti-on
Cal-ci-nà-ti-on
Ca-te-fàc-ti-on
Car-ti-la"gi-nous
Cir-cu-là-ti-on
Cir-cum-am"-bi-ent
Co-a-lèf-cen-cy
Co-a-li"-ti-on
Com-bi-nà-ti-on
Co-met-o"-lo-gy

Com.

Com-pre-hèn-fion
 Com-pli-cà-ti-on
 Con-den-sà-ti-on
 Con-fla-grà-ti-on
 Con-ser-và-ti-on
 Con-fi-mi"-li-ty
 Con-fli-pà-ti-on
 Con-fli-tù-ti-on
 Còn-sum-mà-ti-on
 Con-ti-gù-i-ty
 Con-ti-nù-i-ty
 Con-tra-rì-e-ty
 Co"-pu-là-ti-on
 Cor-po-rì-e-ty
 Co-ru-scà-ti-on
 De-fe-cà-ti-on
 De-glu-ti"-ti-on
 De-gu-ftà-ti-on
 De-li-rà-ti-on
 De-mi-grà-ti-on
 De-nu-dà-ti-on
 De-va-ftà-ti-on
 Di-a-pha-nei-ty
 Di-la-tà-ti-on
 Di-mu-ni"-ti-on
 Dif-po-fi"-ti-on
 Dif-fi-mi"-li-tude
 Dif-fi-pà-ti-on
 Dif-so-lù-ti-on
 Di-u-tùr-ni-ty
 E-bùl-li"-ti-on
 Ef-fi"-ci-en-cy
 E-la-fti"-ci-ty
 E-lec-tri"-ci-ty
 E-le-mèn-ta-ry
 E-ma-nà-ti-on
 E-pi-cù-re-an

Ex-ha-là-ti-on
 Ex-pi-rà-ti-on
 Ex-fuc-cà-ti-on
 Ex-su-dà-ti-on
 Fer-men-tà-ti-on
 Fla-tu-o"-fi-ty
 Flex-i-bi"-li-ty
 Fluc-tu-à-ti-on
 Flux-i-bi"-li-ty
 For-tu-i"-ti-ous
 Fri-a-bi"-li-ty
 Fru-men-tà-ce-ous
 Ful-gu-rà-ti-on
 Ful-mi-nà-ti-on
 Fu-fi-bi"-li-ty
 Fu-tu-ri"-ti-on
 Ge-ne-rà-ti-on
 Ger-mi-nà-ti-on
 Gla-ci-à-ti-on
 Glu-ti-no"-fi-ty
 Gra-mi-ni"-vo-rous
 Gra-vi-tà-ti-on
 Ha-li-o"-gra-phy
 Ho-mo-gè-ne-al
 Ho-mo-gè-ne-ous
 Hy-per-phy"-fi-cal
 Hy-po-the"-ti-cal
 I"-di-o"-cra-fy
 I"-di-o"-pa-thy
 Im-ma-tè-ri-al
 Im-ma-tù-ri-ty
 Im-mo-bi"-li-ty
 Im-pe"-ne-tra-ble
 Im-per-cèp-ti-ble
 Im-per-fèc-ti-on
 Im-preg-nà-ti-on
 In-ca-pa"-ci-ty

In-cli-nà-ti-on
 In-com-bu"-sti-ble
 In-con-cin-ni-ty
 In-con-grù-i-ty
 In-cor-pò-re-al
 In-cor-rùp-ti-ble
 In-cru"-stà-ti-on
 In-cu-bà-ti-on
 In-cur-và-ti-on
 In-di-vi"-du-al
 In-di-vi"-du-um
 In-du-rà-ti-on
 In-e-qua"-li-ty
 In-fer-ti"-li-ty
 In-flam-mà-ti-on
 In-ge"-ne-ra-ted
 In-fe"-pa-ra-ble
 In-fi-pi"-di-ty
 In-spi-ra'-ti-on
 In-spif-fa'-ti-on
 In-tel-lèc-tu-als
 In-tèl-li-gen-cès
 In-ter-mè-di-um
 In-ter-mis-si-on
 In-ter-mùn-di-an
 In-tre-pi"-dity
 In-tro-mis-si-on
 In-tro-fùc-ti-on
 In-tro-fùm-ti-on
 In-tu-i"-ti-on
 In-un-da'-ti-on
 In-vo"-lun-ta-ry
 Ir-ra"-ti-o-nal
 Ir-ri-ga'-ti-on
 Ir-ro-ra'-ti-on
 Ju-ve-ni"-li-ty
 La-cri-ma'-ti-on

Li-que-fa'-c-ti-on
 Ma-de-fa'-c-ti-on
 Man-du-ca'-ti-on
 Ma"-sti-ca'-ti-on
 Ma"-tu-ra'-ti-on
 Me-tal-li"-fe-rous
 Me-tal-lo"-gra-phy
 Me-ta-mòr-pho-sis
 Me-ta-phy"-fi-cal
 Mu-ta-bi"-li-ty
 O-do ri"-fe-rous
 O-le-a"-gi-nous
 O"-pe-ra'-ti-on
 Op-pi-la'-ti-on
 Or-ni-tho"-lo-gy
 Ou-ra-no"-gra-phy
 Par-tu-ri'-ti-on
 Pe-ne-tra'-ti-on
 Per-me-a'-ti-on
 Phy-fi-o"-lo-gy
 Pro"-pa-ga'-ti-on
 Pu-tre-fa'-c-ti-on
 Ra-di a'-ti-on
 Ra-re-fa'-c-ti-on
 Re-flex-i"-vi-ty
 Re-lax-a'-ti-on
 Re-per-cùs-si-on
 Re-so-lù-ti-on
 Re-spi-ra'-ti-on
 Re-fti-tù-ti-on
 Ri-fi-bi"-li-ty
 Sa-li-va'-ri-ous
 Sca-tu-ri"-gi-nous
 Se-me-ni"-fe-rous
 Si"-mi-là-ri-ty
 So-po-ri"-fe-rous
 Spe"-cu-la'-ti-on

Sti-mu-

Sti"-mu-là-ti-on
 Sub-ter-rà-ne-an
 Sub-ter-rà-ne-ous
 Sù-per-fi"-ci-es
 Su-per-na"-tu-ral
 Tan-gi-bi"-li-ty
 Ti-til-là-ti-on
 Trans-for-mà-ti-on
 Trans-me-à-ti-on
 Trans-mi-grà-ti-on

Trans-pi-rà-ti-on
 Tre-pi-dà-ti-on
 Va-ri-e-gà-ted
 Ve-ge-tà-ti-on
 Vi-fi-bi"-li-ty
 Vi-ti-gi"-ne-ous
 U-lu-là-ti-on
 Un-du-là-ti-on
 U-ni-fôr-mi-ty
 Vo-lu-bi"-li-ty

C H A P. III.

Words of six and seven Syllables.

Com-me-mo-rà-ti-on
 Ec-cle-fi-a"-fti-cal
 Ec-cle-fi-a"-fti-cus
 E"-di-fi-cà-ti-on
 E-ja"-cu-là-ti-on
 E-lee-mo"-fy-na-ry
 Ex-tra-pa-rò-chi-al
 Glo-ri-fi-cà-ti-on
 Il-lu-mi-nà-ti-on
 Im-mu-ta-bi"-li-ty
 Im-par-ti-a"-li-ty
 In-com-mèn-su-ra-ble
 In-com-mù-ni-ca-ble
 In-com-pre-hèn-fi-ble
 In-ex-tin-guish-a-ble
 In-fal-li-bi"-li-ty
 I-na-ti-à-ti-on
 In-ter-pre-tà-ti-on
 Ir-re-con-cì-la-ble

Ju"-fti-fi-cà-ti-on
 Me-di-a-tò-ri-al
 O-pi"-ni-o-na-tive
 Pa-ci-fi-cà-ti-on
 Pe-ni-tèn-ti-a-ry
 Pon-ti-fi-cà-li-a
 Pre-de"-fti-nà-ri-an
 Pre-de"-fti-nà-ti-on
 Pro-cra"-fti-nà-ti-on
 Pro-pi"-ti-à-ti-on
 Pro-pi"-ti-à-to-ry
 Pu-ri-fi-cà-ti-on
 Re-ge-ne-rà-ti-on
 Re-fi-dèn-ti-a-ry
 Sanc-ti-fi-cà-ti-on
 Sè-mi-pe-là-gi-ans
 Spi-ri-tu-a"-li-ty
 Sub-or-di-nà-ti-on
 Su-pe-ri-o"-ri-ty

Trans-

Trans-fi-gu-ra'-ti-on
Va-ti-ci-na'-ti-on
U-bi-qui-ta'-ri-ans

PHILOLOGY.

A-bre-vi-a'-ti-on
Am-pli-fi-ca'-ti-on
An-ti-me-ta"-bo-le
An-ti-no-ma'-fi-a
An-ti-pa-ra"-sta-fis
Ant-o"-no-ma'-fi-a
A-po-fi-o-pè-fis
Ar-ti-cu-la'-ti-on
Bra-chy-ca-ta-tòp-tic
Cir-cum-lo-cù-ti-on
Co-me-di-o"-gra-pher
Di-lu-ci-da'-ti-on
E-le-gi-o"-gra-pher
E-lu-cu-bra'-ti-on
E-nun-ti-a'-ti-on
E"-pa"-na-di-plò-fis
E-pi-tha-la'-mi-um
E-ty-mo-lo"-gi-cal
Ex-a-cer-ba'-ti-on
Ex-te-nu-a'-ti-on
Hen-de-ca-syl-la-bon
He-te-ro-gè-ne-al
Hi-sto-ri-o"-gra-pher
Hi-sto-ri-o"-lo-gy
Ho-moe-o-te-lèu-ton
Hy-per-ca-ta-lèc-tic
Hy-per-dis-syl-la-ble
In-ter-ro-ga'-ti-on
Pa-ra-di-a"-sto-le
Pa-ra-fi-o-pè-fis
Pa-ra-syl-la"-bi-cal

Par-o"-no-ma'-fi-a
Phi-lo-hi-sto"-ri-cus
Pro-nun-ci-a'-ti-on
Prof-o"-no-ma'-fi-a
Rhe-to-ri-ca'-ti-ons
Ver-fi-fi-ca'ti-on

MITHOLOGY.

Me-di-tri-na'-li-a

PHILOSOPHY.

Ac-ce-le-ra'-ti-on
An-ni-hi-la'-ti-on
An-te-di-lù-vi-an
Chy"-li-fi-ca'-ti-on
Cla"-ri-fi-ca'-ti-on
Co-a-gu-la'-ti-on
Con-ca-te-na'-ti-on
De-cor-ti-ca'-ti-on
Di-vi-fi-bi"-li-ty
E-ja-cu-la'-ti-on
E-ra"-di-ca'-ti-on
E-va"-cu-a'-ti-on
E-va"-po-ra'-ti-on
Ex-co-ri-a'-ti-on
He-te-ro-gè-ne-al
He-te-ro-gè-ne-ous
Ho-mo-gè-nè-i-ty
Hor-ri-pi-là-ti-on
I"-di-o-syl'n-cra-sy
Il-lu-mi-nà-ti-on
I-ma-gi-nà-ti-on
Im-mu-ta-bi"-li-ty
Im-pe"-tu-o"-fi-ty
In-ar-ti-fi"-ci-al

In-cor-

48 A SPELLING BOOK. 10

In-cor-po-ra`-li-ty
In-cor-po-ra`-ti-on
In-cor-po-rè-i-ty
In-flex-i-bi`-li-ty
In-sen-si-bi`-li-ty
Id-ter-lu-ca`-ti-on
In-ter-po-fi`-ti-on
In-ve`-sti-ga`-ti-on
Ir-ra-di-a`-ti-on
Mal-le-a-bi`-li-ty
Ma-te-ri-a`-li-ty
Mea-fu-ra-bi`-li-ty

Me-te-o-ro`-lo-gy
Mo-di-fi-ca`-ti-on
Mol-li-fi-ca`-ti-on
Or-ga`-ni-za`-ti-on
Pe`-tri-fi-ca`-ti-on
Ra`-mi--fi-ca`-ti-on
Ra-ti-o-na`-li-ty
Re-flex i-bi`-li-ty
Re-fran-gi-bi`-li-ty
Re-fri-ge-ra`-ti-on
Su-per-na-ta`-ti-on
U-ni-ver-sa`-li-ty

Words of Seven Syllables.

Im-ma-te-ri-a`-li-ty
La-ti-tu-di-na`-ri-an
Re-con-ci-li-a`-ti-on
Su-per-e`-ro-ga`-ti-on
Tra`n-sub-sta`n-ti-a`-ti-on

An-ti-pa-ra-fi`-a-fis

PHILOSOPHY.

PHILOLOGY.

A-na-ce-pha-lè-o-fis

Im-ma-te-ri-a`-li-ty
Im-pe`-ne-tra-bi`-li-ty
Ir-ra-ti-o-na`-li-ty

SECT.

SECTION II.

Containing the ALPHABETS,

I. Of COSMOGRAPHY.

IV. Of MECHANICS.

II. Of ARITHMETIC.

V. Of ARCHITECTURE.

III. Of GEOMETRY.

TURE.

With a NEW METHOD to assist the Learner in Spelling, or Dividing the Words of each respective Science into their proper Number of Syllables.

CHAP. I.

Words of Two Syllables.

COSMOGRAPHY.

Æther

Algol

Angle

Anſæ

Anſes

A'pſis

A'ra

A'rtic

A'spect

Auſtral

A'xis

Balance

Cànis

Càſtor

Cèntaur

æ

l

n

n

n

p

a

r

a

u

x

l

a

s

n

Cètus

Circles

Climate

Còlures

Còma

Combùſt

Cò'mets

Còrvus

Cùrtate

Cy'gnus

Degrèe

Dèneb

Dì'git

Dìrèct

Dìſcus

Dràco

Drà'gons

e

r

i

o

o

m

o

r

r

y

e

e

i

i

i

a

a

D

Eclipse

50 A SPELLING BOOK

Eclipse	c	Sa'turn	a
E'pact	p	Sè'cond	e
Fixed	x	Sèxtans	x
Frìgid	i	Sèxtile	x
Gibbous	b	Sòlar	o
Hircus	r	Sy'stem	y
Hy'dra	y	Taurus	u
Ingress	n	Tòrrid	r
Island	i	Trànfit	n
Isthmus	h	Tròpics	o
Lèpus	e	Twilight	i
Lev'ant	e	Venus	e
Libra	i	Vèrtex	e
Lìmit	i	Via	i
Lùnar	u	Virgo	r
Lùpus	u	U'rfa	r
Ly'ra	y	Zenith	e
Milky	l		
Mi'nute	i	ARITHMETICK.	
Nàdir	a		
Nòrthern	r	A'b'stract	s
Oblique	b	Cà'non	a
Optic	p	Cà'ra'ct	a
O'rbit	r	Cà'rat	a
O'rbis	r	Cèntesm	n
Phàses	a	Còmmon	m
Pi'sces	i	Còm'pound	m
Pla'nets	a	Concrète	n
Pòllux	l	Còn'stant	n
Primum	i	Cùbic	u
Quàdrant	a	Cypher	y
Quàrtile	r	Dìgits	i
Quìncunx	n	Discrète	s
Quìntile	n	Disjunct	s
Règel	e	Even	e
Rìgel	i	Fà'ctors	c
Rìsing	i	Fìgures	i

Fluent

Of ARTS and SCIENCES. 51

Fluent	u	Coasting	t
Floving	w	Compass	m
Golden	l	Compound	m
Hundred	n	Concave	n
Index	n	Cònies	o
Inverse	n	Contact	n
Lemma	m	Converse	n
Moments	o	Current	r
Number	m	Cursor	r
Perfect	r	Data	a
Porism }	o	Degrée	e
Porisme }	o	Dial	i
Powers	o	Direct	i
Practice	c	Discrete	s
Problem	b	Disjunct	s
Product	o	Distance	i
Second	e	Erect	e
Simple	m	Extrême	x
Solid	o	Figure	i
Unité	u	Finite	i
		Focus	o
		Frustum	u
		Gauging	g
		Given	i
		Gnomon	o
		Helix	e
		Immense	m
		Label	a
		Lemma	m
		Level	e
		Lobal	o
		Magnet	g
		Measure	a
		Middle	d
		Moments	o
		Needle	e
		Normal	r
		D 2	
		Oblique	

52 A SPELLING BOOK

Oblique
O'blong
Obtuse
O'rders
O'val
Pòrime
Pòrism
Pròblem
Pròduce
Quàdrant
Quàdrat
Rhòmbus
Sàiling
Sècant
Sè'cond
Sèctor
Sègment
Sèxtans
Sèxtant
Sliding
So'lid
Spiral
Squàring
Sùbtense
Sùrface
Survèy
Tàngent
Trànsvérse
Trigon
Vérfed

MECHANICKS.

Air-Pump
A'ngle
A'xis
A'xle

b	Bàlance
b	Bàrrel
b	Bèvel
r	Càscade
o	Cèntre
o	Còntrate
o	Còunter
b	Cùrfor
o	Descènt
a	Èngine
a	Flùid
m	Fly'ing
l	Fùsy }
e	Fusée }
e	Hèlix
c	Hèrmes
g	Làbel
x	Lèver
x	Lè'vel
i	Li'quids
o	Lòcal
i	Lòcking
a	Machìne
b	Meàsure
r	Mòments
r	Movèment
n	Nòrma
s	Oblique
i	O'blong
r	O'val
	Pàllet
	Pòtans }
	Pòtence }
r	Pùlley
n	Ràtchet
x	Sècond
x	Sliding

l
r
e
s
n
n
n
r
e
n
u
y
u
u
e
r
a
e
e
i
o
k
a
a
o
e
r
b
b
o
b
o
e
l
h
e
i

Spiral

Spiral	i	Co'rbat	r
Stàtics	a	Co'rbel	r
Striking	i	Co'rnice	r
Sùrface	r	Co'rniche	r
Sy'phon	y	Co'rnish	r
Vèctis	c	Co'ving	o
Wàrning	n	Dàdo	a
		Do'ric	o
ARCHITECTURE.		Doùcine	u
		Dràgon	a
Alcòve	l	Diptere	p
A'ntæ	n	Eùstyle	u
A'ntes	n	Fàcade	a
A'ntics	n	Fillet	l
Antique	n	Flùtings	u
A'ntic	n	Frèsko	s
Archès	r	Fro'nton	n
A'ttic	t	Gàble	a
Bàllon	l	Girders	r
Bàstion	a	Gùila	l
Beàrer	r	Go'thic	o
Beauty	u	Gùttæ	t
Boultine	l	Impost	m
Bùtmènts	t	Mè'tops	t
Bùttrefs	t	Mì'nute	i
Càmber	m	Mitre	i
Cauking	k	Mo'del	o
Chàmber	m	Mo'dule	o
Chàmbrante	m	Mouldings	d
Chàptrels	p	Mùtule	u
Cima	i	Nèwel	w
Cymaife	y	Nùel	u
Cincture	c	Ogèe	o
Cumn	o	O'rder	r
Cunge	n	O'val	o
Co'nsole	n	Pèrfic	r
Co'rbet	r	Pillar	l
		D 3	

Plàncere	n	Tòrus	o
Plàtform	t	Tri`gliph }	i
Pròfile	o	Triglyph }	i
Pròfit	o	Tringle	n
Pùrchins	n	Tròchile	o
Pùrlines }	r	Tròphy	o
Pùrlins }	r	Tùscan	u
Quàrter	r	Ty`mpan	m
Ròman	o	Zàccho	c
Sy`style	y	Zòcco	c
Tàlon	a	Zòcle	o
Tàlus	a		

C H A P. II.

Words of Three Syllables.

COSMOGRAPHY.		Argument	
Achèner	a r	A`ries	r u
A`frica	a i	Ascènding	a i
Al`geneb	l e	Ascii	a d
Al`lioth	l i	A`sia	a i
Al`titude	l i	A`sterism	a i
A`mplitude	m i	Auriga	a e
Angular	n u	A`zimuth	u i
A`nnual	n u	Bigu`ntile	a i
Antàres	n a	Bòreal	i n
Antàrtic	n r	Bòsphorus	o e
A`pogee	a o	Cà`lendar	s o
Appàrent	p a	Capèlla	a n
A`psides	p i	Cà`pricorn	a l
Aquì`la	a i	Cà`rdinal	a i
Arctùrus	c u	Cà`taract	r i
		Ceginus	a a
			e i

Cèpheus

Of ARTS and SCIENCES. 55.

Cèpheus	e e	O'cean	o e
Consequence	n e	O'rient	o i
Continent	n i	Orion	o i
Corona	o o	Parallax	a l
Curtated	r a	Parallel	a l
Dèferent	e e	Parallels	a l
Delphinus	l i	Pegasus	e a
Dialling	i l	Penumbra	e m
Difference	f e	Period	e i
Diurnal	i r	Perseus	r e
Ecliptic	c p	Phœcyon	o y
Equator	e a	Pianisphere	a i
Equinus	e i	Pleiades	i a
Falcated	l a	Primary	i a
Fasciæ	a i	Quadratures	a a
Finitor	i i	Rectify	c i
Firmament	r a	Région	e i
Fomahant	o a	Retrograde	e o
Galaxy	a x	Sagitta	a t
Gèmini	e i	Satellites	a l
Helice	e i	Scorpio	r i
Hèmisphere	e i	Sensible	n i
Hippeus	p e	Sideral	i e
Horizon	o i	Solstices	l i
Ho'roscope	o o	Station	a i
Hybèrnal	y r	Syzygy	y y
Hy'emal	y e	Telescope	e e
Informed	n m	Temperate	m e
Jupiter	u i	Tropical	o i
Latitude	a i	Vertical	r i
Longitude	n i	Visible	i i
Lucida	u i	Universe	u i
Mercury	r u	Zephias	i i
Motion	o !	Zodiac	o i
Nèbulus	e u		
Nocturnal	c r		
O'ccident	c i		

ARITHMETIC.

Absolute	b o
Abundant	b n
Aggregate	g e
Amable	i a
Algebra	l e
Algorithm	l o
Algorism	l o
Aliquant	a i
Aliquot	a i
Alternate	l r
Binomial	i o
Biquadrate	i a
Calculus	l u
Cardinal	r i
Characters	a c
Chiliad	i i
Circular	r u
Composed	m o
Composite	m o
Consequent	n e
Decimal	e i
Difference	f e
Dividend	i i
Divisor	i i
Evenly	e n
Exponent	x o
Fellowship	l w
Figural	i u
Figurate	i u
Fluxions	x i
Fraction	c i
Genited	e i
Improper	m o
Infinite	n i

Integers	n e
Interest	n r
Laternal	a r
Limited	i i
Linear	i e
Literal	i e
Logarithms	o a
Logistics	o i
Maximis	x i
Multiple	l i
Multiply	l i
Negative	e a
Numeral	u e
Poristic	o i
Positive	o i
Postulates	o u
Quadratic	a a
Quantities	n i
Quotient	o i
Ratio	a i
Rectangle	c n
Resolving	e l
Secundans	e n
Series	e i
Similar	i i
Species	e i
Subduple	b u
Subtrahend	b a
Subtriple	b i
Surfolid	r o
Theorem	e o
Triple	i i
Unciae	n i
Unity	u i

GEOMETRY.

Alternate	l r
Altitude	

Of ARTS and SCIENCES. 57

A ^l titude	l i	Diopter	i p
A ^m bligon	m i	Dirèctrix	i c
A ⁿ gular	n u	Di ^r igent	i i
A ^p erture	a e	Divèrgent	i r
A ^p plicate	p i	Dùplicate	u i
A ^r ea	a e	E ^l ements	e e
A ^s ymptotes	a m	Ellipsis	l p
A ^x iom	x i	E ^v olute	e o
Càlipers	a i	E ^x agon	x a
Càthetus	a e	Extèrnal	x r
Circular	r u	Flùxion	x i
Circumscribe	r m	Fùrniture	r i
Cissloid	f o	Gè ⁿ esis	e e
Còmpasses	m s	Glo ^b ular	o u
Còplement	m e	Gnomo ⁿ ics	o o
Concèntric	n n	Hè ^m isphere	e i
Cònchoid	n o	Hèptagon	p a
Concùrring	n r	Hèxagon	x a
Còngruent	n u	Hòrologe	o o
Cònjugate	n u	Inclining	n i
Co ⁿ oid	n o	Increment	n c
Conscribed	n i	Infinite	n i
Cònsequent	n e	Inscribed	n i
Contingent	n n	Intàctæ	n c
Co ^s ècant	o e	Intèrnal	n r
Co ^t àngent	o n	Involute	n o
Cùbature	u a	I ⁿ agon	i a
Cùrvature	r a	Là ^t itude	a i
Cy ^c loid	y o	Li ^m ited	i i
Cy ^l inder	y u	Li ⁿ ear	i e
Dè ^c agon	e a	Lo ^g arithms	o a
Dè ^c imal	e i	Lòngitude	n i
Dec ^l ining	e i	Lunulæ	u u
Depàrture	e r	Màgnitude	g i
Descrìbent	e i	Mi ⁿ imis	i i
Diagram	i a	Màximis	a i
Dialling	i l	Mechà ⁿ ics	e a

Of ARTS and SCIENCES

59

Equable	e a	ARCHITECTURE.	
Equably	e a		
Exhausted	x t		
Frictions	c i		
Grà'vity	a i		a a
Grà'vitate	a i	A"bacus	n n
Hermè'tic	r e	A"nnulet	r i
Hydràulic	y u	Ar'chitect	r i
Hydràulics	y u	A'rchitrave	a a
Hydràulo	y u	A"stragal	l a
Hy'groscope	y o	Bàldachin	l u
Immersed	m r	Ballùster	l u
Inclined	n i	Ballùstrade	a i
I'sochrone	i o	Bà'filic	t e
Làtion	a i	Bàttlements	a i
Machina	a i	Cà'pital	r u
Màchinist	a i	Cartouzes	a e
Mechà'nics	e a	Cà'thetus	a t
Mechà'nic	e a	Cavetto	a i
Momènta	o n	Chà'peters	a i
Motion	o i	Chà'pitals	m t
Moulinet	u i	Compàrtment	m o
Pà'rallel	a l	Compo'site	r e
Pèndulum	n u	Còrbetel	o o
Pi'nion	i i	Coròna	y n
Pneumà'tics	u a	Cy'linder	y a
Pneumà'tic	u a	Cymàtum	n i
Projèctiles	o i	Dènticles	i a
Pùlsion	l i	Diàstyle	p e
Rè'lative	e a	Dipteron	e l
Speci'fic	e i	Dovetailing	e i
Stà'tical	a i	Echìnus	m a
Thèrmoscope	r o	Embràsure	e i
Tròchlea	h e	E'pistyle	u h
Tròchilice	o i	Eurithmy	a i
Tròcholics	o o	Fàcia	a i
		Fà'scia	

Fròntispiece	n s.	Pà'raster	a a
Fùfarole	u a	Pè'destal	e e
Gàllery	l e	Pè'diment	e i
Hèxastyle	x a	Pè'riftyle	e i
Intèrtics	n r	Perìpters	e i
Io"nic	i o	Piedouche	i e
Làcunar	a u	Piedroit	i e
Làrmier	r i	Pilàster	i a
Mombrètto	m t	Pòrtico	r i
Mè'topa	e o	Pòsticum	s i
Mo"numènt	o u	Projëcture	o c
Nùcleus	u e	Scamilli	a l
O"belisk	o e	Scòtia	o i
O"ctostyle	c o	Shoùldering	l r
O'rdonnance	r n	Sy'mmetry	m e
O'rnament	r a	Tailier	i i
O'volo	o o	Tèt راستyle	e a
Pàllier	l i	Tondino	n i

C H A P. III.

Words of Four Syllables.

COSMOGRA- PHY.		Anti"podes	n i o
Achro"nical	a o i	Antiscii	n i i
Aldè'baran	l e a	Aphèlium	a e i
Alidàda	a i a	Aphèlion	p e i
Almacànters	l a n	Apogæ"um	a o æ
Amèrica	a e i	Aquarius	a a i
Amphiscii	m i i	Arcto"phylax	c o y
Andro"meda	n o e	Armillary	r l a
Ano"maly	a o a	Ascension	a n i
Antiæ'ci	n i æ	Astro"logy	a o o
		Astrono"mic	a o o
		Astro"nomy	a o o

Basilicus

Of ARTS and SCIENCES 61

Baſi"licus	a i i	Interſtellar	n r l
Canic"ulus	a i u	Lampàdias	ma i
Canic"ular	a i u	Libration	i a i
Celèſtial	e e i	Luminaries	u i a
Cherſonèſus	r o e	Meri"dian	e i i
Choro"graphy	o o a	Nocturnable	c r a
Choro"grapher	o o a	Occidental	e i n
Conjunction	n c i	Oriental	o i n
Copèrnican	o r i	Paracèntric	a a n
Cosmo"grapher	s o a	Parallàctic	a l c
Cosmo"graphy	s o a	Paralleliſm	a l l
Cosmo"logy	s o o	Peninſula	n n u
Cosmo"metry	s o e	Perigæ'on	e i æ
Curtation	r a i	Perigæ'um	e i æ
Cynosura	y o u	Periſcii	e i i
Depreſſion	e s i	Periæ'ci	e i æ
Deſcèſion	e n i	Pla'netary	a e a
Domi'nical	o i i	Poè'tical	o e i
Emèrſion	e r i	Poſi'tion	o i i
E"picycle	e i y	Precèſſion	e s i
Equation	e a i	Pro"montory	o n o
Equi"culus	e i u	Pſeudoſtella	u o l
Equinoxes	e i x	Ptolemàic	o e a
Eri'danus	e i a	Rà'tional	a i o
Erèction	e c i	Recèſſion	e s i
Geocèntric	e o n	Reduction	e c i
Geo"grapher	e o a	Reſlèction	e c i
Geogràphic	e o a	Refràction	e c i
Geo"graphy	e o a	Sè'condary	e n a
Heliacal	e i a	Semiquartile	e i r
Heliſcopes	e i o	Semiquintile	e i n
Heniochus	e i o	Semisèxtile	e i x
Horizontal	o i n	Solſtitial	l i i
Hydro"graphy	y o a	Sublunary	b u a
Hypo'theſis	y o e	Succèſſion	c s i
Illuminate	l u i	Syno'dical	n o i
Immèrſion	m r i	Syzy'gia	y y i

Teleſco"pic

62 A SPELLING BOOK

Teleſcoꝑic	e e o	Progreſſion	o s i
Terraqueous	r a e	Propoꝛtion	o r i
Terrèſtrial	r e i	Ràtional	a i o
Topoꝑgraphy	o o a	Reciꝑrocal	e i o
Trajectory	i c o	Reduction	e c i
Triangulus	a n u	Reſiꝑtual	e i u
Vindematrix	n e a	Reverſion	e r i
ARITHMETIC.		Solution	o u i
		Subduction	b c i
		Subduplicate	b u i
		Submultiple	b l i
Addition	d i i	Subſtraction	b c i
Aſſirmative	f r a	Subtriꝑlicate	b i i
Amiable	a i a	Trinoꝑial	i o i
Algebraic	l e a	Univerſal	u i r
Algebraiſt	l e a		
Anàlogy	a a o	GEOMETRY.	
Annuity	n u i		
Antecedent	n e e	Alidada	a i a
Arithmetic	a h e	Almacanters	l a n
Avèrdupoiſe	a r u	Altꝑmetry	l i e
Biquadràtic	i a a	Ambliꝑnal	m i o
Bipartient	i r i	Analemma	a a m
Conſtruction	n c i	Anàlogy	a a o
Contiꝑnual	n i u	Anàlyſis	a a y
Deſiꝑcient	f i i	Anguiꝑneal	n i e
Diviſion	i i i	Animated	a i a
Equation	e a i	Antecedent	n e e
Extraction	x c i	Armiꝑllary	r l a
Gènerated	e e a	Autoꝑmata	u o a
Harmoniꝑcal	r o i	Bimèdial	i e i
Incoꝑpoſite	n m o	Capàcity	a a i
Logiſtical	o i i	Catacàuſtics	a a u
Multiplicand	l i i	Càtenary	a e a
Multiplièr	l i i	Contriꝑugal	n i u
Nùmeràtor	u e a	Centriꝑetal	n i e
Poſition	o i i	Chiliꝑgon	i i o
			Circum-

Of ARTS and SCIENCES. 63

Circumference	r m e	Indetèrmin'd	n e r
Circumscribed	r m i	Intèrior	n e i
Concavity	n a i	Irrègular	r e u
Consèctary	n c a	Isochronal	i o o
Construction	n c i	Isosceles	i o e
Contiuguous	n i u	Logarithmic	o a h
Continued	n i u	Longimetry	n i e
Corollary	o l a	Loxodromics	x o o
Cyclometry	y o e	Loxodromic	x o o
Cylindroid	y n o	Mathematics	a e a
Deficient	e i i	Meridian	e i i
Diagonal	i a o	Multangular	t n u
Diameter	i a e	Octahèdron	c a e
Dimètient	i e i	Orgànical	r a i
Dimènsion	i n i	Orthodromiques	r o o
Divi'sion	i i i	Orthography	r o a
Dodècagon	o e a	Parabola	a a o
Effèction	f c i	Parabolic	a a o
Elliptoid	l p o	Parameter	a a e
Elliptical	l p i	Pentagonal	n a o
Endècagon	n e a	Pentagonous	n a o
Ennèagon	n e a	Peri'phery	e i e
Equicrural	e i u	Perimeter	e i e
Exhaustions	x u i	Planimetry	a i e
Extèrior	x e i	Polyèdron	o y e
Gènerating	e e a	Polyhèdron	o y e
Geo'metry	e o e	Postulata	o u a
Heli'coid	e i o	Proportion	o r i
Hendècagon	n e a	Quindècagon	n e a
Hexahèdron	x a e	Quinqueangled	n e n
Homocèntric	o o n	Reciprocal	e i o
Homo'logous	o o o	Rèctifying	c i y
Horizo'ntal	o i n	Residual	e i u
Hypèrbola	y r o	Rhomboides	m o i
Hypothenuse	y o e	Rhomboid'al	m o i
Hypothesis	y o e	Scio'graphy	i o a
Ichno'graphy	h o a	Semicircle	e i r

Solution

Solùtion	o u i	Hygro"meter	y o e
Subcòntrary	b n a	Immèrſion	m r i
Subdùplicate	b u i	Iſo"chronal	i o o
Subtràction	b c i	Mecha"nical	e a i
Subtri"plicate	b i i	Perpètual	r e u
Tetrahèdron	e a e	Règularly	e u r
Theo"dolite	e o o	Rota"tion	o a i
Transcendèntal	n n n	Thermo"meter	r o e
Trapèzium	a e i	Velo"city	e o i
Trapèzoid	a e o	Vibra"tion	i a i
Triàngular	i n u		
Trila"teral	i a e		
Velo"city	e o i		

MECHANICS.

Æo"lipile	æ o i
Anèmoscope	a e o
Arti"ſicer	r i i
Attra"ction	t c i
Auto"maton	u o a
Auto"mata	u o a
Auto"matic	u o a
Auto"matous	u o a
Baro"meter	a o e
Cele"rity	e e i
Centri"fugal	n i u
Centripe"tal	n i e
Comprèſſion	m s i
Dia"gonal	i a o
Dia"meter	i a e
Dirèction	i c i
Divi"ſible	i i i
Homo"dromus	o o o
Horizo"ntal	o i n
Hydroſta"tics	y o a
Hydroſta"tic	y o a

ARCHITECT.

Amphypro"ſtyle	m y o
Antipa"gments	n i g
Apèrtions	a r i
'Architec"ture	r i c
Areo"ſtyle	a e o
Baſi"lica	a i i
Cantalivers	n a i
Cava"zion	a a i
Cauli"coli	u i o
Compa"rtiment	m r i
Corin"thian	o n i
Enta"blature	n a a
Ichno"graphy	h o a
Modillions	o l i
Monotri"glyph	o o i
Ortho"graphy	r o a
Sceno"graphy	e o a
Scio"graphy	} i o a
Scia"graphy	
Stylo"bata	y o a

CHAP. V.

Words of five, six, and seven Syllables.

COSMOGRA- PHY.		Sagittarius	a t a i
		Serpentarius	r n a i
		Septentrional	p n i o
Almicànterahs	l i n e	Stationary	a i o a
Anabibàzon	a a i a	Telefcòpical	e e o i
Archipèlago	r i e a	Tetragònias	e a o i
Artifi"cial	r i i i	Variàtion	a i a i
Ascènsional	a n i o		
Astronòmical	a o o i	ARITHME-	
Cassiopeà	s i o e	TICK.	
Cometògraphy	o e o a		
Consequèntia	n e n i	Alligàtion	l i a i
Constellàtion	n l a i	Antilògarithm	n i o a
Cosmogràphical	s o a i	Arithmètical	a h e i
Culminàtion	l i a i	Artifici"al	r i i i
Declinàtion	e i a i	Biparti"tion	i r i i
Elevàtion	e e a i	Co-effi"cient	o f i i
Elongàtion	e n a i	Combinàtion	m i a i
Equinòctial	e i c i	Commensurable	m n u a
Geogràphical	e o a i	Dactylo"nomy	c y o o
Heliocèntric	e i o n	Deno"minator	e o i a
Heteròscii	e e o i	Differèntial	f e n i
Inclinàtion	n i a i	Exponèntial	x o n i
Nonagèsimal	o a e i	Indetèrmined	n e r i
Occultàtion	c l a i	Involùtion	n o u i
Opposi"tion	p o i i	Irràtional	r a i o
Perihèlion	e i e i	Isomèria	i o e i
Periodical	e i o i	Multiplicàtor	l i i a
Prosthèresis	o a e e	Numeràtion	u e a i
Pythagorean	y a o e	Permutàtion	r u a i
Retrocèssion	e o s i	Polynòmial	o y o i
			Propo'r-

66 A SPELLING BOOK

Proportion	o r i o	Mensuration	n u a i
Sesquialteral	e i l e	Meridional	e i i o
Sexagenary	x a e a	Mesolabium	e o a i
Sexagesimal	x a e i	Multilateral	l i a e
Substitution	b i u i	Navigation	a i a i
Superficial	u r i i	Orthographical	r o a i
Superpartient	u r r i	Oxygonial	x y o i
Transposition	s o i i	Parabolic	a a o i
Tripartition	i r i i	Paraboloid	a a o o

GEOMETRY.

Application	p i a i	Perambulator	r m u a
Baculometry	a u o e	Perpendicular	r n i u
Catenaria	a e a i	Proportional	o r i o
Centrobarycal	n o a y	Pyramidoid	y a i o
Circumferentor	r m e n	Pythagorean	y a o e
Commensurable	m n u a	Quadrilateral	a i a e
Composition	m o i i	Resolution	e o u i
Contiguity	n i u i	Revolution	e o u i
Declination	e i a i	Sesquialteral	s i l e
Declinatory	e i a o	Stereography	e e o a
Definition	e i i i	Stereographic	e e o e
Demonstration	e n a i	Superficies	u r i i
Dodecahedron	o e a e	Transmutation	s u a i
Duplication	u i a i	Trigonometry	i o o e
Epicycloid	e i y o	Tripartition	i r i i
Equilateral	e i a e	Variation	a i a i
Geodesia	e o e i		
Geometrical	e o e i	MECHANICS.	
Helicophy	e i o o		
Hyperboliform	y r o i	Accelerated	c e e a
Icosahedron	i o a e	Areometer	a e o e
Inaccessible	n c s i	Artificial	r i i i
Inclination	n i a i	Automatic	u o a i
Indivisible	n i i i	Catenaria	a e a i
Intersection	n r c i	Centrobarycal	n o a y

Dilatation

Of ARTS and SCIENCES. 67

Dilatation	i a a i	Restitution	s i u i
Equilibrium	e i i i	Superficies	u r i i
Equilibrium	e i i i		
Gravitation	a i a i	ARCHITECT.	
Heterodromus	e e o o		
Hypomochlion	y o o i	Acrotèrions	a o e i
Intersection	n r c i	Carya'tides	a y a i
Oscillation	s l a i	Compartition	m r i i
Peristorchium	e c o i	Stereo'bata	e e o a
Polyspastium	o y s i	Trabeation	a e e i

COSMOGRAPHY.

Antecedentia	n e e n i
Dodecatemory	o e a e o

ARITHMETIC.

Approximation	p x i a i
Arithmetician	a h e i i
Extermination	x r i a i
Heterogeneous	e e o e e
Incommensurable	n m n u a
Multiplication	l i i a i
Quadrpartition	a i r i i
Sesquitertional	e i r i o
Superparticular	u r r i u

GEOMETRY.

Apomecèmetry	a o e e e
Circumgyration	r m y a i
Commensurable	m n u a
Diametrically	i a e i l
Divisibility	i i i i i
Geometrical	e o e i i

Incom-

66 A SPELLING BOOK

Propo ^r tional	o r i o	Mensuration	n u a i
Sesquiàlteral	e i l e	Meri ^d ional	e i i o
Sexagèmary	x a e a	Mesolàbium	e o a i
Sexagèsimal	x a e i	Multilàteral	l i a e
Substitution	b i u i	Navigation	a i a i
Superfi ^c ial	u r i i	Orthogràphical	r o a i
Superpartient	u r r i	Oxygo ⁿ ial	x y o i
Transposition	s o i i	Parabo ^l ical	a a o i
Tripartition	i r i i	Parabo ^l oid	a a o o

GEOMETRY.

Application	p i a i	Perambulàtor	r m u a
Baculo ^m etry	a u o e	Perpendi ^c ular	r n i u
Catenària	a e a i	Propo ^r tional	o r i o
Centrobàrycal	n o a y	Pyrami ^d oid	y a i o
Circumferèntor	r m e n	Pythago ^r ean	y a o e
Commensurable	m n u a	Quadrilàteral	a i a e
Composi ^t ion	m o i i	Resolùtion	e o u i
Contiguity	n i u i	Revolution	e o u i
Declination	e i a i	Sesquiàlteral	s i l e
Declinatory	e i a o	Stereo ^g raphy	e e o a
Defini ^t ion	e i i i	Stereogra ^{ph} ic	e e o e
Demonstration	e n a i	Superfi ^c ies	u r i i
Dodecahedron	o e a e	Transmuta ^t ion	s u a i
Duplica ^t ion	u i a i	Trigono ^m etry	i o o e
Epicy ^c loid	e i y o	Triparti ^t ion	i r i i
Equilàteral	e i a e	Variàtion	a i a i
Geodæsia	e o æ i		
Geomètrical	e o e i	MECHANICS.	
Helico ^s ophy	e i o o		
Hyperbo ^l iform	y r o i	Accèlerated	c e e a
Icosahèdron	i o a e	Areo ^m eter	a e o e
Inaccèssible	n c s i	Artifi ^c ial	r i i i
Inclina ^t ion	n i a i	Automa ^t ical	u o a i
Indivi ^s ibles	n i i i	Catenària	a e a i
Intersèction	n r c i	Centrobàrycal	n o a y

Dilata^tion

Of ARTS and SCIENCES. 67

Dilatation	i a a i	Restitution	s i u i
Equilibrium	e i i i	Superficies	u r i i
Equilibrium	e i i i		
Gravitation	a i a i	ARCHITECT.	
Heterodromus	e e o o		
Hypomochlion	y o o i	Acrotèrions	a o e i
Intersection	n r c i	Carya'tides	a y a i
Oscillation	s l a i	Compartition	m r i i
Peristorchium	e c o i	Stereo'bata	e e o a
Polyspastium	o y s i	Trabeation	a e e i

COSMOGRAPHY.

Antecedentia	n e e n i
Dodecatemory	o e a e o

ARITHMETIC.

Approximation	p x i a i
Arithmetician	a h e i i
Extermination	x r i a i
Heterogeneous	e e o e e
Incommensurable	n m n u a
Multiplication	l i i a i
Quadripartition	a i r i i
Sesquitertional	e i r i o
Superparticular	u r r i u

GEOMETRY.

Apomecèmetry	a o e e e
Circumgyration	r m y a i
Commensurable	m n u a
Diametrically	i a e i l
Divisibility	i i i i i
Geometrician	e o e i i

Incom-

Incommensurable

| n m n u a |

Multiplication

| l i i a i |

Parallelopleuron

| a l e o u |

ARCHITECT.

Architectonice

| r i c o i |

Hypotrachelion

| y o a e i |

Pallification

| l i i a i |

GEOMETRY.

Horologigraphy

| o o o i o a |

Isoperimetric

| i o e i e i |

Parallelopedon

| a l e o i e |

ARCHITECTURE.

Intercolumnation

| n r o m a i |

SECT.

Of ARTS and SCIENCES. 69

SECTION III.

Of the ALPHABETS,

I. Of ANATOMY.

III. Of PHARMACY.

II. Of PHYSIC.

IV. Of BOTANY:

WITH

The RULES of DIASTASIS,

O R,

The ART of SPELLING.

ALL Words are either *Simple* or *Compound*; as *Use*, *Disuse*; *done*, *undone*; and the Rules for dividing each must be such as are derived from the *Analogy of Language* in general, or from the *established Custom* of Speaking. And these for the *English Tongue* are the following, viz.

RULE I. A Consonant between two Vowels must be join'd with the latter in Spelling; as *Nature*, *ve-ri-ly*, *ge-ne-rous*; except (*x*) as in *Flax-en*, *Ox-en*, *wax-en*, &c. and compound Words, as *up-on*, *un-used*, &c.

RULE II. A double Consonant must be divided; as in *Let-ter*, *swag-ger*, *les-ser*, *Man-ner*, &c.

RULE III. Those Consonants which can begin a Word, must not be parted in Spelling, as in *de-fraud*, *re-prove*, *di-stinct*, &c. though this Rule sometimes fails; for (*gn*) begins a Word, as *Gnaw*, *Gnat*; but must be divided in Spelling, as in *Cog-ni-zance*, *Ma-lig-nant*, &c.

RULE

70 A SPELLING BOOK

RULE IV. Those Consonants which cannot begin a Word, must be divided; as (*ld*) in *fel-dom*; (*lt*) in *Mul-ti-tude*; (*mp*) in *Tem-por*; (*rd*) in *Ar-dom*, &c. But in final Syllables we make Exceptions, as (*tl*) in *Ti-tle*; (*dl*) in *Han-dle*, &c.

RULE V. When two Vowels come together, and are both of them distinctly sounded, they must be separated in Spelling; as in *Cre-a-tor*, *Co-e-val*, *Mu-tu-al*, *Cy-lo-id*, *No-ab*, &c.

RULE VI. All grammatical Terminations, or Endings, must be separated in Spelling; as, (*ed*) *winged*; (*edst*) in *de-li-ver-edst*; (*eth*) in *Hear-eth*; (*ing*) in *Hear-ing*; (*en*) in *writ-en* (*ness*) in *Good-ness*; (*ance*) in *De-li-ver-ance*; (*less*) in *Shame-less*; (*ly*) in *true-ly*, &c.

RULE VII. Compound Words must, in Spelling, be resolved into their simple or component Words; as, *up-on*; *in-to*; *never-the-less*; *not-with-stand-ing*; *al-to-ge-ther*, &c. But this Rule will be imperfect (though it be of the greatest Importance and Extent in the following Alphabets) unless the Learner has it branched out into several particular ones, pointing out the several compounding Words in the original Languages, from whence ours is derived. Therefore,

RULE VIII. In the *Latin* Tongue, the compounding Prepositions and Words which most frequently occur, and by which the rest will be easily known, are as follow:

<i>Lat. Prepos.</i>	<i>Words.</i>	<i>English.</i>
<i>A.</i>	from <i>Verto</i> , to turn	<i>A-vert</i>
<i>Ab.</i>	from <i>Solvo</i> , to loose	<i>Ab-solve</i>
<i>Abf.</i>	from <i>Teneo</i> , to hold	<i>Abf-tain</i>
<i>Ac.</i>	to <i>cedo</i> , to yield	<i>Ac-cede</i>

Of ARTS and SCIENCES. 71

<i>Lat. Prepos.</i>	<i>Words.</i>	<i>English.</i>
<i>Ad,</i> to	<i>Oro,</i> to pray	<i>Ad-ore</i>
<i>Af,</i> against	<i>Firmo,</i> to strengthen	<i>Af-firm</i>
<i>Ag,</i> against	<i>Gravo,</i> to make heavy	<i>Ag-gra-vate</i>
<i>Al,</i> to	<i>Ligo,</i> to bind	<i>Al-ligate</i>
<i>An,</i> to	<i>Necto,</i> to tie	<i>An-nex</i>
<i>Ap,</i> to	<i>Paro,</i> to prepare	<i>Ap-pa-ra-tus</i>
<i>Ar,</i> to	<i>Rogo,</i> to ask	<i>Ar-rogant</i>
<i>As,</i> to	<i>Signo,</i> to sign	<i>As-sign</i>
<i>At,</i> to	<i>tenuo,</i> to thin	<i>At-tenuate</i>
<i>Circum,</i> about	<i>Fero,</i> to carry	<i>Cir-cum-ference</i>
<i>Cog,</i> with	<i>Natus,</i> born	<i>Cog-nate</i>
<i>Col,</i> with	<i>Lego,</i> together	<i>Col-lect</i>
<i>Com,</i> with	<i>Mitto,</i> to send	<i>Com-mit</i>
<i>Con,</i> with	<i>Duco,</i> to lead	<i>Con-duce</i>
<i>Contra,</i> against	<i>Dico,</i> to speak	<i>Con-tra-dict</i>
<i>Cor,</i> with	<i>Rodo,</i> to gnaw	<i>Cor-rode</i>
<i>De,</i> from	<i>Horto,</i> to persuade	<i>De-hort</i>
<i>Dis,</i> from	<i>Sentio,</i> to think	<i>Dis-sent</i>
<i>E,</i> out of	<i>Duco,</i> to lead	<i>E-du-cate</i>
<i>Ef,</i> out	<i>Fluo,</i> to flow	<i>Ef-fluent</i>
<i>Ex,</i> out of	<i>Spisso,</i> to thicken	<i>Ex-spissated</i>
<i>Extra,</i> without	<i>Vago,</i> to wander	<i>Extra-vagant</i>
<i>Intro,</i> within	<i>Duco,</i> to lead	<i>Intro-duce</i>
<i>Inter,</i> between	<i>Venio,</i> to come	<i>Inter-vene</i>
<i>Ob,</i> against	<i>Struo,</i> to build	<i>Ob-struct</i>
<i>Per,</i> through	<i>Colo,</i> to strain	<i>Per-colation</i>
<i>Post,</i> after	<i>Pono,</i> to place	<i>Post-pon</i>
<i>Sub,</i> under	<i>Scribo,</i> to write	<i>Sub-scribe</i>
<i>Super,</i> above	<i>Sedo,</i> to sit	<i>Super-sede</i>
<i>Trans,</i> beyond	<i>Fero,</i> to carry	<i>Trans-fer</i>

Besides this Method of compounding Words with Prepositions, there are a great Number of others compounded of two proper Words, as of *Magnus*, great, and *Animus*, the Mind, is made *Magnanimous*; of *Solus* alone, and *Loquor* to speak, is made *Soliloquy*,

Soliloquy, &c. But in these, the above Rule will not exactly take place; for we must not say *Magnanimous*, but *Mag-nanimous*.

RULE IX. In like Manner the *Greek* Compounds may be known by the Prepositions as follow, *viz.*

<i>A</i>	—A-trophy	<i>Eu</i>	—Eu-trophy
<i>Anti</i>	—Anti-dote	<i>Hyper</i>	—Hyper-catharsis
<i>Amphi</i>	—Amphi-bious	<i>Hypo</i>	—Hypo-chondriac
<i>Apo</i>	—Apo-plexy	<i>Meta</i>	—Meta-stasis
<i>Cata</i>	—Cata-ract	<i>Para</i>	—Para-lysis
<i>Dia</i>	—Dia-gnostics	<i>Peri</i>	—Peri-pneumony
<i>En</i>	—En-Arthrosis	<i>Sym</i>	—Sym-ptom
<i>Epi</i>	—Epi-phyxis	<i>Syn</i>	—Syn-arthrosis

In the *Greek* also, the Method of compounding Words of Words obtains, and indeed to a much greater Degree than in any other Language; but as this is an Affair that can't well be subjected to meer *English* Rules, I know of nothing more that can be done, to enable the Learner to spell truly all Kinds of technical Words, and Terms of Art, but learning the original Tongues themselves, which would give him a great Advantage over others in this Respect; and that may be very easily done, after he has first learn'd the *English* Grammar, by the Methods I shall be then ready to put into his Hands.

CHAP. I.

Words of Two Syllables.

ANATOMY.

Adèps	Co'rpus	Hy'men
A'læ	Co'stæ	Jècur
A'lvus	Co'xæ	I'ncus
A'ncon	Criftæ	I'ndex
A'nus	Crùra	Jùcture
A'tlas	Cùbit	Jùxta
Aùris	Cùtis	Kidneys
A'xis	Cy'stis	La'rynx
Bàrrel	Cy'stic	Lo'ngus
Bàfis	Da'rtos	Ly'mpha
Ba'thmus	Dèntes	Ma'mmæ
Biceps	Do'rsum	Ma'trix
Bla'dder	Dùctus	Mèmbra
Brèvis	Fœ'ces	Mèmbra
Bròncus	Fèmur	Mèninx
Cœ'cum	Fibres	Mèn'es
Ca'lva	Fingers	Mèntum
Ca'nthus	Fœ'tus	Midriff
Ca'rdo	Fo'rnix	Mi'ctus
Ca'ro	Fro'e'num	Mùcro
Ca'rpus	Fro'ntis	Mùcus
Ca'va	Ga'ster	Mùcle
Cèrvix	Glène	Na'res
Cho'ler	Glo'ttis	Na'fus
Còccyx	Gùttur	Na'tes
Còllum	Hèbe	Nèrvous
Co'lon	Hèlix	No'thæ
Co'mpage	Hèpar	No'thus
	Hòrtus	Nùcha
	Hùmours	Ny'mphæ
	E	Oèstrum

Oèstrum
 O'ptic
 O'rbit
 O'rgan
 O'fla
 O'vum
 O'va
 Peitus
 Pèllis
 Pèlvis
 Pènis
 Phàlanx
 Phàryn
 Phrènes
 Pia-Màter
 Pili
 Pinna
 Plànta
 Pleùra
 Plèxus
 Pòdex
 Pòllex
 Pòmum
 Pòples
 Pòri
 Pòrta
 Pòrus
 Primæ
 Psòas
 Pùbes
 Pùbis
 Pùlmo
 Pùñctum
 Py'xis
 Rèctus
 Rècti

Rèctum
 Rènes
 Rète
 Rìma
 Ròstrum
 Sàccus
 Sàcer
 Sàcrum
 Sànguis
 Scròtum
 Sèlla
 Sèmen
 Sèptum
 Sèrous
 Sèrum
 Sìnus
 Sitis
 Spèrma
 Sphìñcter
 Spinal
 Spìrits
 Spùtum
 Stàpes
 Stàpis
 Stèrnum
 Stò'mach
 Striæ
 Strìctor
 Sùccus
 Sùdor
 Sùra
 Tàlus
 Tàrsus
 Tènar
 Tèndon
 Tères

Te'stes
 Tèxture
 Thòrax
 Thy'mus
 Tònfils
 Tràgus
 Trùncus
 Tùbæ
 Vàsa
 Vàstus
 Vèna
 Vènter
 Vèrtex
 Villi
 Vita
 U'lna
 U'nguis
 Vòla
 Vòmer
 U'rine

PHYSIC.

A'bscess
 A'chor
 A'cme
 A'cor
 Acùte
 A'gues
 A'lphus
 A'lvus
 A'mbe
 A'mma
 A'ngi
 A'pthæ
 A'r'dor

A'sthma

Asthma
Bathrum
Benign
Bubo
Callous
Cancer
Canine
Carus
Catarrh
Causus
Caustics
Cho'lic
Chordè
Chro'nic
Cistus
Cli'nic
Cly'ster
Coma
Consent
Contra
Coolers
Crâsis
Cri'sis
Cystics
Dise'ase
Drâstic
Drôpsy
Errhine
E'schar
Fâmes
Fèbris
Ficus
Fissure
Flatus
Fluor
Fo'rcps

Fo'rfex
Fracture
Fre'ckle
Fur'fur
Furor
Gangrene
Gibbous
Gutta
Habit
Hamus
He'tic
Hippus
Hor'ror
Humours
Hy'drops
I'chor
Imbibe
Incide
Lancet
Languor
Lentor
Lence
Ly'sis
Ly'ssa
Madness
Marasm
Men'ses
Mi'asma
Mola
Morbid
Morbus
Morpheus
My'ops
Nervines
Orgasm
Oze

Palsy
Panade
Pa'nic
Partus
Pe'ptics
Pestis
Phthi'sis
Phy'ma
Phy'fic
Plaga
Poi'son
Pso'ra
Ptarmos
Puncture
Putrid
Quartan
Quinsey
Rigor
Ro'istrum
Rupture
Saga
Scala
Sche'fis
Schirrus
Semen
Se'ptic
Se'rbus
Sitis
Spina
Splanchnics
Squinsy
Strengtheners
Struma
Strumous
Stupor
Styptics
Sudor

Sùdor
Sùture
Sy'mptom
Sy'ringe
Tàbes
Tàpping
Tères
Thèca
Thèrmæ
Thròmbus
To'pics
Trèmor
Trepàn
Tùmor
Tùffis
Ty'pus
Vapours
Va'rix
Ulcer
Vo'mit

PHARMACY.

A'cid
A'ctive
Adèpts
A'quæ
Aùrum
Bàlsam
Bismuth
Bòlus
Bùtter
Càmphire
Càput
Cè'rate
Cèrus

Chìna
Chry'stal
Chè'mist
Cònserves
Còpal
Co'ral
Cròcus
Cùprum
E'ssence
E'xtract
Flòwers
Fòtus
Fròntale
Gambòge
Gàscoign
Gòà
Ja'lop
Japàn
Jùlap
Jùlep
La'zule
Linctus
Litus
Lòhoc
Lo'zenge
Lùna
Magma
Màнна
Ma'stich
Ma'trafs
Mixtures
Mòxa
Mummy
Mùlsun
Nitre
Nòdule

Nùtmegs
Ointment
Philtum
Plaister
Plàster
Pòwder
Pùlvis
Ptisan
Pùltice
Re'fin
Rètort
Ròstrum
Sàndyx
Scrùple
Spikenard
Spi'rit
Stòrax
Stùpha
Sùlphur
Sy'rup
Tàrtar
Tèrra
Tincture
Tùrbith
Vipers
Wàters
Xy'lo

BOTANY.

A'nnal
A'pex
Bèrries
Brànches
Bùlbose
Bùlbous

Ca'lix

Of ARTS and SCIENCES. 77

Ca'lix	Hèrbal	Plu'mule
Càpsule	Imbibe	Pistil
Càtkins	Incrèase	Ra'dix
Co'ral	Juices	Ra'dule
Còrtex	Kèrnel	Ra'mose
Di'scous	Lignous	Rìnglet
Fibres	Lo'cule	Seèdlet
Fibrous	Màtrix	Squa'mmose
Filtrate	Matu're	Sta'men
Flo'wer	Mo'sses	Tra'n'sverse
Fùngus.	Nèclar	Trèfoil
Gèrmen	Pappo'se	U'mbel
Gru'mous	Plàntule	Vinous

C H A P. II.

Words of Three Syllables.

ANATOMY.		
Abdo'men	A'spera	Ca'rtilage
Abdu'cent	Atto'llens	Cèllulæ
Abdu'ctor	Axilla	Cepha'lic
Addu'cent	Azy'gos	Cè'rebrum
Addu'ctor	Bala'nus	Cho'rion
Adna'ta	Bico'rnis	Cìlia
Ala'res	Bivènter	Clito'ris
A'mnion	Bursa'lis	Co'ccigis
A'nnular	Ca'llamus	Co'chlea
Ao'rta	Ca'lidum	Coe'liac
A'quaduct	Canini	Colu'mnæ
A'queous	Caninus	Complexus
A'rtery	Ca'psula	Co'ndyli
Arthro'sis.	Cardia	Co'nglobate
	Carina	Contra'ctile
	Carno'sa	Co'rnea
	E 3	Coro'ne

Coròne	Ga'nglio	Lympha'tics
Còrpora	Gemèllus	Ma'lleus
Còrrugate	Gè'mini	Ma'ffaters
Còrtical	Gè'nitals	Maxilla
Còrrugent	Gìngivæ	Mea'tus
Cò'tyle	Gìnglymus	Mèdius
Cra'nium	Glò'bulus	Medùlla
Crema'ster	Glutæ'i	Mendòsus
Cribròsum	Gòmphosis	Meninges
Cro'taphites	Gra'cilis	Mèntula
Cruæ'us	Hùmerus	Mìctio
Cy'sticus	Hùmilis	Mola'res
Da'cryon	Jè'junum	Nephri'tic
Detrùsor	I'liac	Nìctitans
Dì'dymoi	I'lium	Nùtriment
Dì'gitus	Impùber	O'cciput
Diplòe	Inguen	O'culus
Dì'stra'ctile	Intèstines	O'culi
Embryo	I'schium	Oma'sus
Emùlgent	I'schias	Omèntum
Eury'thmus	Jùgular	O'mphalos
Exa'nguis	Jùgulum	O'rbiter
Excrement	La'bia	Org'anic
Fa'culty	La'bial	O'scula
Fenè'stra	La'byrinth	O'viducts
Fi'bula	La'chrymal	Pala'tum
Fi'laments	La'chrymæ	Palma'ris
Fimbriæ	La'cteal	Palpe'bræ
Fla'mmula	Lacùnæ	Pa'ncreas
Flexòres	Lamèllæ	Papillæ
Fodina	La'minæ	Par-Va'gum
Fora'men	Libido	Patèlla
Fòvea	Li'gament	Pathe'tic
Fronta'les	Li'nea	Pèctinis
Fùnction	Lumba'res	Pèllice
Fùrcula	Ly'mphaducts	Pèrforans

Peròna
Petròsum
Phrene^{tic}
Placènta
Plantàris
Probòscis
Procèssus
Profundus
Prostàtæ
Pudènda
Pupilla
Pylòrus
Py^{xidis}
Quadràtus
Rà^{chitæ}
Ràdius
Rè^{crement}
Recùrrēt
Rè^{fluent}
Rè^{tina}
Rotàtor
Ròtula
Rotùndus
Sàcculus
Salival
Saphæ^{na}
Scalènum
Scà^{pulæ}
Scè^{leton}
Sèction
Serràtus
Sì^{milar}
Sìnciput
Solèus
Spadònes
Spermà^{tic}
Spinàti

Splèni
Spòndylus
Sta^{mina}
Sublìmis
Supèrbus
Te^{gument}
Tempòrum
Tènsion
Te^{sticles}
Tha^{lami}
Thorà^{cic}
Ti^{bia}
Traccæ^a
Trochènter
Tùnica
Ty^{mpanum}
Vagìna
Vè^{tricle}
Vè^{træ}
Vè^{sica}
Vi^{scera}
Vi^{sion}
U^{reters}
Urèthra
U^{rinous}
U^{terus}
U^{terine}
U^{vea}
U^{vula}
Zygoma

PHYSIC.

A^{bluents}
Absòrbents
Abstèrgent
Acòustics

A^{crafy}
Æ^{gylops}
Agry^{pony}
Agy^{rtæ}
A^{mulet}
A^{nchylops}
A^{ncylæ}
A^{neurisma}
Angina
Anglicus
Anhèlus
A^{nodyne}
A^{ntidote}
Apèlla
Apèpsy
A^{phony}
A^{phorism}
A^{posteme}
A^{ppetite}
Arcànum
Archæ^{us}
Arthritis
Ary^{thmos}
Astringents
Atàxy
Athlè^{tic}
A^{tony}
A^{trophy}
Balsà^{mics}
Bè^{chica}
Bùlimy
Cachè^{ctic}
Cachèxy
Cadùcus
Cà^{lenture}
Capistrum
Càrbuncle

Càrdiac

80 A SPELLING BOOK

Ca'rdiac
Ca'ricous
Ca'ries
Caro'li
Ca'runcles
Ca'taract
Catha'rtics
Ca'theter
Catho'lic
Cau'tery
Cepha'lics
Ciru'men
Chira'gra
Chloro'fis
Cho'logogues
Cho'lera
Chymo'fis
Ci'catrize
Cica'trix
Cæ'liac
Co'nfluent
Co'ntinent
Co'rdials
Corrèctor
Cosme'tic
Cri'tical
Cru'dity
Cycliscus
Denta'gra
De'ntifrice
Detèrgents
Di'aclysm
Digèstive
Dilu'ents
Dilu'tors
Dy'scrasy
Dy'spepsy

Dyspnoë'a
Di'sfury
Ecphra'ctic
Ame'tic
E'mpiric
Ende'mic
E'nema
E'pithem
Erra'tic
Eu'chrasy
Eury'thmus
Eupèpsy
Eupnoë'a
Eu'pory
Eusa'rcos
Eu'taxy
Eu'trophy
Exa'nguis
Excre'scence
Fe'brifuge
Fi'stula
Fo'r'mula
Fri'ction
Ga'nglion
Glauco'ma
Glauco'fis
Gona'gra
Grave'do
Gu'mmata
Gymna'stics
Hœ'matops
Hœ'morrhage
Helo'des
Hepa'tic
He'rnia
Hi'ppuris
Hirco'si

Hy'dragogue
Hydro'pic
Hydro'tics
Hypno'tics
Hyste'ric
Hyste'rics
Jatros
I'cteric
I'cterus
I'liac
Immatu're
Impotence
Impre'gnate
Impos'sthume
Impu'ber
Inci'ders
Incubus
Influent
Ingenit
Inva'lid
Ischæ'ma
Ischias
Ischury
La'ssitude
La'titude
Laxative
Le'ntigo
Le'prosy
Leptu'ntics
Letha'rgic
Le'thargy
Le'ucoma
Libi'do
Li'gature
Li'ppitude
Lo'chia
Lumba'go
Lu'natic

Of ARTS and SCIENCES. 81

Lùnatic
 Lùnacy
 Lùxated
 Ly'nceus
 Mà'culæ
 Mà'lady
 Malignant
 Mà'nia
 Mè'dicate
 Mè'dicine
 Melò'fis
 Melò'tis
 Mèn'strual
 Mè'thodus
 Mi'nera
 Mò'chlia
 Monò'rchis
 Morbilli
 Mù'tilate
 My'opy
 Narco'tics
 Nàrco'fis
 Nàu'sea
 Ne'bulæ
 Ne'phritis
 Nephri'tics
 Neuro'tics
 Ny'ctalops
 Obstè'trix
 O'bst'ruents
 O'culist
 Odòntics
 CEdèma
 O'phthalmy
 Ophthàl'mics
 O'piates
 Ozèna

Panàda
 Paràcme
 Pà'roxy'sm
 Pàthema
 Pà'tient
 Pè'ctorals
 Pe'lican
 Pè'pà'smos
 Peracùte
 Pè'riod
 Pè'rnio
 Phimò'fis
 Phlègmatic
 Phlègmone
 Phlogò'vis
 Phlyc'tæ'na
 Phre'nitis
 Phy'gethlon
 Phy'sical
 Ple'nitide
 Plero'tics
 Ple'thora
 Ple'thoric
 Pleù'ritis
 Pleù'rify
 Podàgra
 Po'lypus
 Prèsby'tæ
 Priapism
 Pro'dromus
 Prognò'fis
 Progno'stics
 Protràctor
 Prurigo
 Pruritus
 Pso'rica
 Ptàrmica

Pty'lofis
 Pty'smagogue
 Pùrgatives
 Pùrulent
 Pù'stulæ
 Pù'stulous
 Pù'trify
 Pycno'tics
 Pyro'tics
 Ràchitis
 Ra'nula
 Re'gimen
 Repèllents
 Resòlvents
 Rheùmatism
 Ripeners
 Sa'bulous
 Sa'native
 Sànguifuge
 Sà'nies
 Sà'nity
 Sàrcoma
 Sàrco'fis
 Sàxifrage
 Scàbies
 Schi'troma
 Schir'rosis
 Sclero'tics
 Scorbùtics
 Scorbùtus
 Scro'phula
 Secùndine
 Sè'ssilis
 Singùltus
 Si'nuous
 Solùtive
 Spasmo'dics

Spa"tula
 Specillum
 Spe"culum
 Spha"celus
 Spha"celism
 Spiracules
 Sple"netic
 Spora"dic
 Spùrious
 Squinaney
 Stegnòsis
 Stegno"tics
 Stigmata
 Stoma"chies
 Strangury
 Sùstitute
 Subsùltus
 Sùccubus
 Sùffitus
 Sy'mpathy
 Sy'ncope
 Sy'ndrome
 Sy"nochos
 Sy'nthesis
 Sy"philis
 Tæ'nia
 Taràntism
 Tenèsmus
 Tentigo
 Te"rebra
 Termìnthus
 Tèrtian
 Te"tanus
 Thermàntics
 Thora"tics
 Ti"nea
 Tòrmina

Tòxica
 Traumà'tics
 Tùbercles
 Turgèscence
 Ty'mpany
 Ty'rosus
 Va"letude
 Ve"nery
 Vèrmifuge
 Vèrruca
 Vèrrucous
 Vertigo
 Vi"rulent
 U'lcereous
 Vo"mica
 Vo"mitive
 Xeràntics
 Xeròdes

PHARMACY.

Acètum
 Ærùgo
 Ætites
 Agrèsta
 A'kali }
 A'lhali }
 A'lcahest
 A'lchymist
 A'lchymy
 A'lcohol
 Alèmbick
 A'lgaret
 A'ludels
 A"nodyne
 A"pozem
 Argèntum
 Armèna

Arsenic
 A'thanor
 Bàlneum
 Bdèllium
 Bènjamin
 Be"zoar
 Bitùmen
 Buty'rum
 Ca"lomel
 Capivi
 Caràna
 Càrdomoms
 Càssia
 Cà'techu
 Ca"taplas'm
 Cè'roma
 Chalcànthum
 Chry'stalize
 Chy"mical
 Chy'mistry
 Cinnabar
 Cinnamon
 Còhobate
 Còlcothar
 Consi'stence
 Corrèctor
 Crùcible
 Cucùpha
 Cucùrbitt
 Cùrcuma
 Diaclysm
 Diànthus
 Digèster
 Eclègma
 Elixir
 Emplàster
 E"pithem

Fluxion

Of ARTS and SCIENCES. 83

Fluxion
Fra'nkincense
Fusion
Ga'langals
Galbanum
Ga'rgarism
Gentian
Gua'iacum
Güttela
Herme'tic
Hi'era
Hy'dromel
Isinglass
Jupiter
Lambatives
Laudanum
Le'mnian
Le'vigate
Li'niment
Lotion
Marmalade
Me'dicine
Me'lilot
Menstruum
Mercury
Mi'thridate
Morsuli
Oleum
Opium
Orpiment
Oxycrate
Oxymel
Pana'da
Pastilli
Pessary
Pharmacy
Pharmacum

Phosphorus
Pimento
Pomatum
Pomegra'nates
Pompholix
Portion
Principles
Quicksilver
Quiddany
Quiddeny
Quinquina
Quintessence
Radula
Rasuræ
Re'gister
Re'gulus
Re'sidence
Re'sinous
Rotulæ
Saccharum
Sacculi
Sandarach
Sarcocol
Sassafras
Saturnus
Scammony
Spag'iric
Spa'girist
Spa'tula
Species
Stratify
Sublimate
Tabella
Ta'marinds
Tra'gacanth
Trochisci
Turmeric

Turpentine
Verdigrease
Vinegar
Vintriol
Volatile

BOTANY.

Absorbent
Acetous
Aliment
Annular
Annulus
A'pices
Aqua'tic
Botany
Branchery
Calices
Catalins
Crenated
Cuticle
Discoid
Embryo
Empalement
Evergreens
Exotic
Farina
Fecundate
Fistulous
Foliage
Genesis
Granulous
Impregnate
La'teals
Medulla
Mechanism
Nectarine

Nècrarine
O'vary
Pèllicle
Pènnated
Pèrfidols
Pe'tala
Ra'dicle

Sèrrated
Si'liquæ
Si'liquous
Sta'mina
Stèllated
Submarine
Tràcheæ

Tùbera
Tùberose
Tùberous
Vèssicles
Vègetate
Umbrellò

C H A P. III.

Words of Four Syllables.

ANATOMY.

Abomàsus
Acròmium
Adepòsum
A'lisòrmes
Alvèoli
Anà'tomy
Anconæus
Andro'tomy
Annuèntes
Anòmphalous
Anta'gonists
Antitènar
Apo'physis
Arànea
Arèola
Astra'galus
Aùditory
Aurìculæ
Axillary
Basi'lica
Basilàre
Bifurcated
Brachicæus

Broncho'tomy
Buccinàtor
Calcàneus
Calvária
Capillary
Cartilàgo
Carùculæ
Castràtion
Cerebèllum
Choròides
Ciliàre
Clavi'culæ
Clinòides
Coccygæus
Conàrion
Condylòma
Conglo'merate
Connivèntes
Constrictòres
Coronàlis
Co'ronary
Corrugàtor
Cribriforme
Cubiforme
Cubitocæus

Cubòides
Cuti'cula
Cynodèntes
Deltòides
Denti'tion
Diarthròsis
Dia'stole
Dia'stricus
Dige'stion
Dilatòres
Dissec'tion
Diffi'milar
Distènsion
Distraction
Duplicature
Dura-Màter
Elevàtor
Enarthròsis
Ensi'formis
Epicòlic
Epidèrmis
Epigàstrum
Epiglòttis
Epi'physis

Epi-

Of ARTS and SCIENCES. 85

Epiplo'fis
 Erythroïdes
 Ethmoïdes
 Excrétion
 Extensòres
 Fallòpian
 Fasciàlis
 Folli'culus
 Glenoïdes
 Hyoïdes
 Hypogastric
 Hypo'thenar
 Incisòres
 Inglùvies
 Inguinàlis
 Intègument
 Intercòstal
 Involùcrum
 Lachrymàle
 Lamböïdes
 Lati'ssimus
 Levatòres
 Longi'ssimus
 Lumbricàles
 Malleolus
 Mammifòrmes
 Mammi'llary
 Mandi'bula
 Mastöïdes
 Maxi'llary
 Mecònium
 Mediànum
 Membranòsus
 Mesaræ'um
 Mèfoglòffi
 Mèso-Ple'uri
 Me'tacàrpus

Me'tatarsus
 Milliary
 Motòrii
 Mucronàtum
 Myloglòffum
 Myo'logy
 Myo'tomy
 Myrtifòrmes
 Neuro'logy
 Neuro'tomy
 Nutri'tion
 Obe'fity
 Oblìquus
 Obturato'res
 CEsophagus
 Omo'plata
 Orbi'cular
 Ovària
 Panni'culus
 Parago'ge
 Parastatæ
 Parènychyma
 Paro'tydes
 Pectinæ'us
 Pectoràlis
 Perforatus
 Peristàltic
 Peronæ'us
 Phlebo'tomy
 Pineàlis
 Pingue'do
 Pituita
 Pi'tuary
 Politee'us
 Præco'rdia
 Præputium
 Produ'ction

Pronato'res
 Pto'tuberance
 Psycho'logy
 Ptery'gium
 Pulmonàlis
 Pulmonary
 Pyri'formis
 Radiæ'us
 Ranulàres
 Renue'ntes
 Reti'culum
 Retracto'res
 Rhomböïdes
 Ro'strifòrmis
 Sacrolumbus
 Sagittàlis
 Salvatella
 Sarto'rius
 Schaphöïdes
 Sclero'tica
 Scorbi'culus
 Scutifòrme
 Secre'tion
 Semilünar
 Sigmöïdes
 Sphenöïdes
 Spheröïdes
 Spirà'cula
 Spongiòsum
 Spongöides
 Stylifòrmis
 Styloglòffus
 Stylöides
 Subclavian
 Sublingual
 Synarthròsis

Syn-

Synchondrosis
 Temporalis
 Thyroides
 Tibialis
 Tibialis
 Trachotomy
 Transversalis
 Trapezium
 Tricuspides
 Trochleares
 Trochoides
 Vaginalis
 Varicosum
 Vermicular
 Vesicular
 Vestibulum
 Virilia
 Umbilicus
 Umbilical
 Xiphoides

PHYSIC.

Abaptition
 Abortion
 Abrasion
 Accession
 Acidula
 Acmaesticos
 Acrocordon
 Adenosus
 Adstrictory
 Æstuary
 Affection
 Aloetics
 Alophency
 Alteratives
 Amaurosis

Amblyopy
 Ambrosia
 Anabasis
 Anabrosis
 Analéptics
 Anarrhoea
 Anasarcha
 Anorexy
 Antemetics
 Anthelmintics
 Apéritics
 Apoplepsis
 Apoplexy
 Apoptosis
 Apoptrophe
 Apparatus
 Apoplexy
 Araneus
 Archiater
 Aromatic
 Ascarides
 Asthmas
 Atheroma
 Balbuties
 Borborygmus
 Bronchocèle
 Bronchotomy
 Cacœthes
 Cachoymy
 Cæsarius
 Callosity
 Carcinoma
 Cardialgy
 Carminatives
 Castration
 Catagmetic
 Catalépsis

Catamenia
 Cathartics
 Cephalalgia
 Chirurgery
 Circocele
 Colliquate
 Commetica
 Complexion
 Conception
 Congestion
 Consolidate
 Consumption
 Contagion
 Continual
 Contorsion
 Contraction
 Contusion
 Convalescence
 Convulsion
 Corroborate
 Corruption
 Cutaneous
 Cymatodes
 Cynanthropy
 Cynodectus
 Cynorexy
 Cystotomy
 Debility
 Declension
 Defensative
 Defluxion
 Dejection
 Deliquium
 Delirium
 Delirious
 Dentarius
 Dentition

Of ARTS and SCIENCES. 87

Deòbstruents	Gomphiasis	Leucorrhæa
Deficcative	Gonorrhœa	Lièntery
Diabètes	Hæmàptôic	Limo"machy
Diagnòstic	Halmyròdes	Limo"logy
Diate"tic	Helminthagogue	Lipo"thymy
Diarrhœa	Hemì"crany	Lithiasis
Diathèsis	Hemì"plegy	Lithontriptics
Discùtients	Homo"tonos	Litho"tomy
Diure"tic	Hydàtides	Litho"tomist
Dogma"tica	Hydrocèle	Luxàtion
Dogma"tici	Hydropège	Lycànthropy
Dy"sentery	Hydrò"phoby	Lycòides
Ecchymòsis	Hydrophthàlmy	Lypì"ria
Efflorescence	Hygiàstic	Malàsia
Ejèction	Hygièa	Maràsmodes
Embryùlus	Hygièna	Medicàster
Emmènagogues	Hypercrìsis	Me"dicated
Emòllients	Hypòphthalmy	Medi"cinal
Empyèma	Hypòstasis	Medi"cament
Ephèmera	Impe"tigo	Melà'nagogues
Epide"mic	Implicated	Me"lancholy
E"pilepsy	Incarnatives	Melanchò"lic
Epi"phora	Indùrating	Melicèris
Epispàstic	Infection	Mentulàgra
Epulo"tic	Infirmàry	Mercùrials
Erùption	Injèction	Meta"basis
Escharo"tics	Inquietude	Metàptosis
Exànthema	Insània	Metàstasis
Exòpthalmy	Intention	Methò"dica
Exòstosis	Intermittent	Methò"dici
Expànson	Intumescence	Modiolus
Expèctorate	Invalèscence	Monò"culus
Extràction	Inve"terate	Morti"ferous
Extràneous	Inùstion	Non-nà"turals
Exùstion	Ischia"tic	Oblèson
Fonti"culus	Ischure"tics	Obstrùction
Gestàtion	Lectùalis	Odontàlgy
		Orthopnæa

Orthopnæ'a	Retention	Tyriasis
Orvietan	Revulsion	Variolæ
Palindromy	Roscolæ	Vene'real
Palliative	Ructation	Vo'mitory
Panacea	Salacious	Vulneraries
Panchy'magogue	Salutary	Xero'phtalmy
Para'lysis	Sarcocèle	
Paraplëgy	Saty'riasm	PHARMACY.
Paraplëxy	Sceloty'rbe	
Parago'rics	Scia'tica	Ablution
Pathogno'mic	Sclerò'phtalmy	Amalgamate
Patho'logy	Screation	Anga'licus
Peri'clasis	Scrotocèle	Antihe'tic
Perirrhæ'a	Secession	Aroma'tic
Perizòma	Secretion	Benedictum
Petèchiæ	Semimàres	Benedictus
Petèchial	Sero'fity	Brefi'lium
Phagedœna	Setaceum	Canthàrides
Phage'denic	Solution	Cassumunair
Philiàtros	Somni'ferous	Castore'um
Phlebo'tomy	Somnolency	Catho'licon
Phlegmo'nodes	Spasmo'logy	Ceration
Physi'cian	Staphylòma	Cerelcœ'um
Pollution	Stea'toma	Chaly'beate
Prediction	Steri'lity	Colly'rium
Procatartic	Subùberès	Colo'phony
Procatàrxis	Succussion	Confection
Profluvium	Sudori'fics	Corallinum
Pforòphtalmy	Suffusion	Deco'ction
Psy'chago'gics	Suppurative	Deli'quium
Puèrpera	Suppression	Dephlegmated
Purgation	Tarantati	Dià'chylon
Quoti'dian	Tena'cula	Diapente
Recrudescence	Terebellum	Diaprunum
Refec'tion	Therape'utics	Dia'sena
Remedium	Tracho'tomy	Digestion
Remission	Transfusion	Elixerate

Of ARTS and SCIENCES. 89

Empyreuma
 Emulsion
 Euphorbium
 Expression
 Extraction
 Filtration
 Fixation
 Fluidity
 Hydragrum
 Hypocistis
 Infusion
 Injection
 Lixivium
 Lixivial
 Lixivious
 Magistery
 Manipulus
 Mechoacan
 Meco'nium
 Medicament
 Mercurials
 Millèpedes
 Myrobalans
 Officinal
 Olibanum
 Opodeldoch
 Opopanax
 Parmasitty
 Passulatum
 Pharmacopæius
 Philonium
 Populneon
 Poterius

Precipitate
 Pyrotechny
 Recipient
 Remedium
 Sagapenum
 Sarfaparil
 Solution
 Sympathetic
 Tabulum
 Tacamahac
 Testaceous
 Theriaca
 Vermilion
 Volatilize

BOTANY.

Acetary
 Amphibious
 Anomalous
 Apetalous
 Bacciferous
 Calculary
 Capillary
 Capilated
 Coniferous
 Cotyledon
 Culmiferous
 Deciduous
 Dipetalous
 Elaborate
 Floriferous
 Foliate
 Galeated

Hermaprodite
 Indigenus
 Inoculate
 Inosculate
 Juliferous
 Labiated
 Lactiferous
 Leguminous
 Maturity
 Medullary
 Miniature
 Monospermous
 Nutrition
 Organical
 Parenchyma
 Parenchymous
 Perennial
 Perianthum
 Phyto'logy
 Plantation
 Polyspermous
 Pomiferous
 Prunifetous
 Quinquupartite
 Reticular
 Sinuated
 Stamineous
 Stellated
 Terrestrial
 Tricapsular
 Tripetalous
 Vegetable
 Vegetative

C H A P. IV.

Words of Five Syllables.

ANATOMY.

Aceta^{bulum}
 Adeno^{graphy}
 Albugi^{nea}
 Allentö^{ies}
 Alveari^{um}
 Amatoriⁱ
 Anästoma^{sis}
 Anthro^{logy}
 Anticardi^{um}
 Aphrodi^{fia}
 Apo^{neurösis}
 Arachnö^{ides}
 Basioglö^{ssum}
 Canali^{culus}
 Canici^{dium}
 Cèratoglö^{ssus}
 Cèratö^{ides}
 Cineri^{tious}
 Circula^{tion}
 Coracö^{ides}
 Cotyle^{done}
 Cunieför^{me}
 Decussa^{tion}
 Deferen^{tia}
 Degluti^{tion}
 Dilata^{tion}
 Elythrö^{ides}
 Embryo^{tomy}
 Emuncto^{ries}

Entero^{logy}
 Epidi^{dimis}
 Epistrophæ^{us}
 Eructa^{tion}
 Expira^{tion}
 Extrava^{sated}
 Farcimina^{lis}
 Galacto^{phorous}
 Gallina^{ginis}
 Gastero^{tomy}
 Genera^{tion}
 Genioglö^{ssi}
 Gynæcoma^{styx}
 Hypochöndriac
 Hypoga^{strium}
 Hystero^{tomy}
 Infundi^{bulum}
 Innomina^{tum}
 Inspira^{tion}
 Interösseⁱ
 Interospina^{les}
 Laryngo^{tomy}
 Longitudinal
 Mandibula^{res}
 Marsupia^{lis}
 Mediastin^{um}
 Meditüll^{ium}
 Mesariaca
 Mesentèri^{um}
 Metacarpi^{um}
 Mucila^{ginous}

Mulièbria

Of ARTS and SCIENCES. 91

Muliebria
Naviculære
Occipitales
Odontoides
Olecranium
Olfactorii
Osteology
Palpitation
Patientiæ
Pericardium
Pericranium
Periosteum
Peristromata
Peritonæum
Perspiration
Pharyngotomy
Præparantia
Pterigoides
Pyramidalis
Pyrenoides
Quadrage-mini
Receptaculum
Respiration
Reticularis
Sapiëntiæ
Semi-nervosus
Semi-spinatus
Subcutaneous
Subscapularis
Supercilium
Supinatores
Supraspinatus
Synastomafis
Thyröideæ
Transpiration
Triangularis

Vesicularis
Zygomaticus

PHYSIC.

Acantabolus
Alexipharmic
Amputation
Anacathartic
Analogismus
Anaplerotics
Antepileptics
Aphrodisia
Apocatharsis
Atte nuating
Bubonocèle
Cataphrastica
Climacterical
Comitiâlis
Complication
Cucurbitula
Deleterious
Dentiscalpium
Depilatory
Derivation
Desudation
Diaphoresis
Diaphoretics
Dilatation
Dilatatorium
Dislocation
Embrocation
Embryothlastes
Eneorema
Enervation
Enterocèle
Epicarpium

Epicàrpium
 Epiceràstic
 Epiplocète
 Eruçtation
 Erysi"pelas
 Exaltàtion
 Exoneirosis
 Expiration
 Extirpation
 Extravàfated
 Gynæcomàstos
 Hæmatocèle
 Hæmatochy"sis
 Hæmorrhoides
 Hemera"lopy
 Here"ditary
 Heterory"thmus
 Hippocra"tica
 Hydroce"phale
 Hypercathàrsis
 Hypocathàrsis
 Hypochòndriac
 Hysteràlgia
 Hysterocèle
 Jàtraleiptes
 I"dio"pathy
 Imbecillity
 Inàppetency
 Incantàtion
 Incarna"tion
 Incòntinency
 Indica"tion
 Inflamma"tion
 Inspira"tion
 Institu"tions
 Intempéries

Invo"luntary
 Irrita"tion
 Itera"rium
 Laryngo"tomy
 Lectistèrnium
 Lucophlègmacy
 Matura"tion
 Megalospla'nchnos
 Meningo"phylax
 Metafy"ncrisis
 Minora"tiva
 Myopiasis
 Odontàgogos
 Omphalocèle
 Opera"tion
 Oscita"tion
 Pallia"tion
 Palpita"tion
 Paracèntæsis
 Paracma"sticos
 Paracyna'nche
 Paraphi'mosis
 Paraphrè'nitis
 Parony"chia
 Pediluvium
 Perfora"tion
 Periny"ctides
 Perio"dical
 Periphè'mosis
 Peripneumony
 Peripyèma
 Perisy"stole
 Perspira"tion
 Pestilential
 Pharmacèutica
 Physio"gnomist

Physiognomy

Physiognomy
 Physiognomics
 Physiology
 Pneumatocèle
 Procidèntia
 Psychrolúfia
 Pyretology
 Relaxation
 Repercùtients
 Respiràtion
 Retinaculum
 Revulforia
 Roboràntia
 Salivàtion
 Salivàntia
 Satyriasis
 Segregàtion
 Semeiòtica
 Semitèrtian
 Sideràtion
 Soporiferous
 Spermatocèle
 Stenothoràces
 Sternutàtion
 Stèrnutàtoires
 Subcutaneous
 Succeda'neum
 Succussàtion
 Suffoca'tion
 Subpeda'nea
 Supplanta'lia
 Suppura'tion
 Tempera'ntia
 Titilla'tion
 Typhomania
 Vesica'tion

Ulceràtion

PHARMACY.

Ægyptiacum
 Amoni'acum
 Antimònium
 Apo'thecary
 Auripigmèntum
 Calamina'ris
 Calcina'tion
 Carpoba'lsamum
 Cerefa'ction
 Cohoba'tion
 Colliqua'tion
 Composi'tion
 Crepita'tion
 Dealba'tion
 Decanta'tion
 Deflagra'tion
 Dephlegma'tion
 Depura'tion
 Despuma'tion
 Detona'tion
 Diaca'ssia
 Diacòdium
 Diascòrdium
 Diagri'dium
 Diatra'gacanth
 Dispensa'tion
 Dispensatory
 Dissolùtion
 Distilla'tion
 Ebulli'tion
 Elatèrium

Elèctuary

94 A SPELLING BOOK

Ele^ctuary
 Elixàtion
 Exaltàtion
 Exhalàtion
 Fermentàtion
 Fomentàtion
 Fulmina^tion
 Fumiga^tion
 Ichthyoco^lla
 Inhumàtion
 Infola^tion
 La^boratory
 Leviga^tion
 Liquefa^ction
 Macera^tion
 Malaxa^tion
 Ma^sticatory
 Nicotiaⁿa
 Oleosa^ccharum
 Opera^tion
 Opoba^lsamum
 Oxycro^cceum
 Oxyrrho^dium
 Pentapha^rmacon
 Pharmaco^logy
 Pharmacopæⁱa
 Pha^rmacopæⁱus
 Pharmaco^polift
 Prepara^tion
 Refurre^ction

Rhodosa^ccharum
 Sublima^tion
 Suppo^sitory
 Transmuta^tion
 Tritura^tion
 Terebiⁿthina

B O T A N Y.

Botano^logy
 Corymbi^ferous
 Circula^tion
 Genera^tion
 Gymnodispe^rmous
 Impregna^tion
 Laciⁿiated
 Longitu^dinal
 Mono^pe^talous
 Multifi^liquous
 Perspira^tion
 Pentapè^talous
 Propaga^tion
 Testi^culated
 Tetrape^talous
 Trifo^liated
 Vasculi^ferous
 Vegeta^tion
 Umbelli^ferous
 Vertici^llated
 Umbi^licated

C H A P. V.

Words of Six, Seven and Eight Syllables.

ANATOMY.

Accelerato`res
Arterio`tomy
Articula`tion
Arytenöi`des
Arytenöide`us
Chylifica`tion
Cricothyroi`des
Cuniefor`mia
Excoria`tion
Gasterocne`mium
Gasterocne`mii
Hyrhryoi`des
Indignato`rius
Inoscula`tion
Manducato`rii
Mesenteri`aca
Peristaphili`nus
Pteristaphyli`ni
Ramifica`tion
Sanguifica`tion
Semimembra`nus
Sesamoi`dea
Sphe`nopharynge`us
Sphe`nopalati`nus
Ste`rnohyoi`des
Ste`rnothyroi`des
Sty`lopharynge`us

Su`ccenturiatæ
Vespertilio`num

P H Y S I C.

Adiapne`ustia
Adultera`tion
Alexite`rial
Antaphrodi`fiac
Aphrodisi`acum
Attenua`tion
Dacryopoe`os
Deoppi`latory
Elephanti`asis
Evacua`tion
Exacerba`tion
Exanima`tion
Excoria`tion
Exinani`tion
Exulcera`tion
Idiosy`ncrasy
Ingravida`tion
Inocula`tion
Itinera`rium
Mortifica`tion
Nöli-me-ta`ngere
Pandicula`tion
Pedicula`tion
Scarifica`tion

96 A SPELLING BOOK

Scarifica'tion
Sophistica'tion
Superfoeta'tion

PHARMACY.

Adultera'tion
Amalgama'tion
Caryocòstinum
Chrysta'liza'tion
Clarifica'tion
Coagula'tion
Decrepita'tion
Deflagra'tion
Diacatho'licon
Diacora'llion
Diacydònum
Edu'lcora'tion
Eleosa'ccharum
Evapora'tion
Incorpora'tion
Ipecacua'nha

Mundifica'tion
Pha'rmacochy'mia
Precipita'tion
Pulveriza'tion
Purifica'tion
Rectifica'tion
Redintegra'tion
Refri'geratory
Regenera'tion
Resuscita'tion
Revèrberatory
Sophistica'tion
Stratifica'tion

BOTANY.

A'spenfoliate
Enangiospèrmous
Gra'minifoliate
Papiliona'ceous
Ra'mifica'tion

Words of Seven Syllables.

ANATOMY.

Aba'rticula'tion
Còracobra'chià'lis
Dearticula'tion
Gèniohy'oidor'us
My'lohy'oidce'us
Pterigopha'ringèus

PHYSIC.

Exa'rticula'tion
Hy'steromatòcia
Sca'rificatòrium
Valetudina'rian

PHARMACY.

PHARMACY.

Alcoholiza'tion | Revi'vifica'tion

Words of Eight Syllables.

ANATOMY.

Còracohy'oidèus		Sphènopterigopalatìnus
Crìcoarytenòidèus		Thy'roarytænòides



T H E
R U D I M E N T S
O F
E N G L I S H G R A M M A R .

P A R T . II.

AFTER the Scholar has attain'd to the Art of the *true Pronunciation and Spelling of Words*; he is next to be instructed in the Art of *Writing, and Speaking every Word according to the present establish'd Custom of the English Tongue*. In order to this, we must distinguish Words into their respective Kinds or Classes, and then consider the Accidents of each, which is the essential Part of GRAMMAR, in every Language.

Words are rightly referr'd to four general Classes, viz. 1. Such as denote Things by *Nature*, which are called NOUNS or NAMES; as a *House, a Tree, a Man, a Horse, &c.* 2. Such as express ACTION or PASSION, as *I love, to be loved*, and these are called, VERBS of AFFIRMATION. 3. Such as denote the Way or Manner of doing or suffering; as *swiftly, slowly, rightly, wisely, &c.* which are called ADVERBS. 4. *Particles*, or such small Words as serve to connect others together, in forming any *Expression or Sentence*. Of which in Order.

I. Of

I. Of N O U N S.

A NOUN, or the Name of a Thing, is of two Sorts, viz. 1. Those which denote the *Subject*, or *Thing itself*, as a *Man*, a *Horse*, *John*, &c. and these are usually call'd *Substantives*. 2. Those which denote the *Properties or Qualities* of Things, as *good*, *tall*, *swift*, &c. but as these require to be join'd with the *Nouns*, as a *good Man*, a *swift Horse*, &c. so they are called *Noun-Adjectives*, or barely *Adjectives*.

SUBSTANTIVES are distinguished into *proper* and *common*. *Proper Names*, are such as denote the *Individual* of any Species; as *John*, *Sarah*, *Dobbin*, *Severn*, &c. *Common Names*, denote the *Kinds* or *Species*, as a *Man*, a *Horse*, a *River*, &c.

As *proper Names* denote Persons, so those which we make Use of to denote the *threefold Distinctions of Persons*, are in a peculiar Manner expressed, and call'd PRONOUNS; and these are different, according as the Persons we speak of are of the *singular* or *plural Number*, that is, as they are *one*, or *more than one*.

When we speak of *ourselves*, it is call'd the *first Person*; and if we are but one, the *Pronoun* is *I*; if more, *we*. If we speak immediately to a *Person*, we call that the *second Person*; and the *Pronoun* is *thou*, if *singular*, and *ye*, in the *plural Number*. *Lastly*, if we speak of a *Person* or *Thing*, it is called the *third Person*; and the *Pronoun* in the *Singular*, if it be a *Male*, is *he*; if a *Female*, *she*; if neither (or of no Gender) we say *it*. But in the *plural Number*, the *Pronoun* is *they*, whether of the *Masculine*, *Feminine*, or *Neuter Gender*.

In *NOUNS* or *NAMES*, we distinguish the *plural* from the *singular Number*, by adding (*s*) to the latter generally. As a *Horse*, *Horses*; *River*, *Rivers*; *Word*, *Words*, &c. But if the *Singular* ends in (*x*) (*ch*) (*sh*); then (*es*) is added to form the *Plural*, as *Fox*, *Foxes*; *Church*, *Churches*, *Bush*, *Bushes*. Very often the *Plural* is form'd by (*en*) as *Ox*, *Oxen*; *Man*, *Men*; *Brother*, *Brethren*; *Chick*, *Chicken*. Those *Names* which end the *Singular* in (*f*) or (*fe*) form the *Plural* by (*ves*) as *Calf*, *Calves*; *Loaf*, *Loaves*; *Leaf*, *Leaves*; *Knife*, *Knives*; *Wife*, *Wives*, &c.

But in forming the *Plural*, there is great *Irregularity* in our *Tongue*, for many *Words* can be reduced to no *Rule* at all, as will appear by the following *Table*.

<i>Singular</i>	<i>Plural.</i>	<i>Singular</i>	<i>Plural.</i>
Die	Dice	Foot	Feet
Mouse	Mice	Tooth	Teeth
Louse	Lice	Penny	Pence
Goose	Geese		

In many *Words* we have no *Difference* of *Number*, as in *Sheep*, *Deer*, *Fern*, *Hose*, *Swine*, &c. Sometimes we find no *singular Number* to *Words*; as *Ashes*, *Bellows*, *Lungs*, *Tongs*, *Wages*, *Breeches*, *Scissars*, *Snuffers*, &c. And some have no *Plural*; as the *Names* of *Countries*, *Cities*, *Rivers*; also of *Virtues* and *Vices*; of *Metals*, *Herbs*, and *Corn*.

The *Distinction* of *Gender* in *English*, is generally by different *Words*, as in the following.

<i>Masculine</i>	<i>Feminine.</i>	<i>Masculine</i>	<i>Feminine.</i>
Boy	Girl	Man	Woman
Boar	Sow	King	Queen
Brother	Sister	Lad	Lass
			<i>Masculine</i>

OF ENGLISH GRAMMAR. 101

<i>Masculine</i>	<i>Feminine.</i>	<i>Masculine</i>	<i>Feminine.</i>
Buck	Doe	Ram	Ewe
Bull	Cow	Master	Mistress
Bullock	Heifer	Wizard	Witch
Cock	Hen	Lord	Lady
Father	Mother	Nephew	Niece
Dog	Bitch	Stag	Hind

But some make the *Feminine*, by adding (*ess*) to the *Masculine*; as *Lion, Lioness; Actor, Actress; Duke, Dutchess; Heir, Heiress; Poet, Poetess, &c.* And a few by adding (*ix*) as *Administratrix, Executrix, Directrix, &c.*

NOUNS are applied in six different Respects, commonly called the *Cases of Nouns*, viz. The *Nominative*, the *Genitive*, the *Dative*, the *Accusative*, the *Vocative*, and the *Ablative*.

The *Nominative Case*, is that wherein we barely name the Thing, and is known by the Particle *the*, or *a*; as *the Man, a House, &c.*

The *Genitive Case*, is that which denotes *Property* or *Possession*, and is known by the Particle (*of*); as the *Wisdom of Solomon; the Harmony of Sounds, &c.*

The *Dative Case*, denotes the *giving* or *doing* of something to a Person or Thing; and is known by the Particle (*to*) as to swear Allegiance *to the King*, Glory *to God* in the highest, &c.

The *Accusative Case*, is that which immediately follows the Verb, and is the Subject of its Action or Affirmation; as I read *the Book*, I make *a Pen*, I write *a Sentence, &c.*

The *Vocative Case*, is that which calls upon a Person or Thing, and is known by the Exclamation (*O!*) as, to you, *O Men*, I call; how manifold are thy Works, *O Lord! &c.*

The *Ablative Case*, is known by the Prepositions *in, with, through, for, from, by, than, &c.* All

which Cases in both Numbers, are here expressed as below,

<i>Singular.</i>	<i>Plural.</i>
<i>Nom.</i> A Man	Men
<i>Gen.</i> Of a Man	Of the Men
<i>Dat.</i> To a Man	To the Men
<i>Accus.</i> The Man	The Men
<i>Voc.</i> O Man	O Men
<i>Abl.</i> From the Man	From the Men.

But the *Genitive Case* is most commonly (and indeed most elegantly) expressed by (*s*) with an Apostrophe (') added to the Noun; thus we say, *Man's Nature*, instead of the *Nature of Man*, *Peter's Book*, for the *Book of Peter*.

The PRONOUNS in all the Cases after the Nominative, take a different Form, according to the following Diagram.

	<i>Singular.</i>	<i>Plural.</i>
	1. 2. 3.	
<i>Nom.</i>	I, thou, he, she,	We, ye, they
<i>Gen.</i>	Of me, thee, him, her,	Of us, you, them
<i>Dat.</i>	To me, thee, him, her,	To us, you, them
<i>Accus.</i>	me, thee, him, her,	us, you, them
<i>Voc.</i>	O me, thou,	O, ye
<i>Abl.</i>	From me, thee, him, her,	From us, you, them.

The *adjective Pronouns* denoting our Property or Possession, are in each Person in the *Nominative Case*, before the Noun, *my, thy, his*, in the Singular; and in the Plural, *our, your, their*; as *my Book, thy Book, &c.* But after the Noun, we change *my* and *thy*, into *mine* and *thine*; and add (*s*) to the above Plurals; as that Book of *mine*, that Tongue of *thine*; this Age of *ours*, the House of *yours*, &c.

The

Of ENGLISH GRAMMAR. 103

The *Interrogatives* *who*, for a Person, and *what* for a Thing, make *whom* after the *Verb*, and in every Case but the Nominative, and the Genitive Plural *whose*. The Indicative Pronouns *this*, *that*, in the Singular, make *these* and *those*, in the Plural. The first points to any Thing near or present; the other to Things remote or absent.

In *Adjectives*, or Names of Quality, there are *comparative Degrees* of their Signification; and these we distinguish into three, viz. 1. The *simple* or *positive Degree*, as *hard*, *soft*, *white*, *swift*, &c. where the Quality is only barely mention'd. 2. The *comparative Degree*, where we speak of it *comparatively*, and this we form by adding (*er*) to the Positive; as *harder*, *softer*, *whiter*, *swifter*, &c. 3. The *superlative Degree*, where we express the highest Degree of Quality possible, and this is done by the Termination (*est*); as *hardest*, *softest*, *whitest*, *swiftest*; but in Comparison of *Adjectives* there is great Irregularity, and the different Degrees are expressed by so many different Words; as *good*, *better*, *best*; *bad*, *worse*, *worst*; and very often we compare by the Words *more*, *most*; as *bright*, *more bright*, *most bright*. We also increase or diminish, the two first Degrees by the Words *more*, *much*, *very*, *little*, &c. As *known*, *much known*, *little known*; *larger*, *much larger*, *little larger*, *very large*, *very much larger*, &c.

II. Of VERBS.

VERBS are distinguish'd into *active*, and *passive*; the first denoting *Action*, as *I love*; the other *Passion* or *Suffering the Action*; as *I am loved*. In both Kinds, we consider the following *Accidents*, viz. *Person*, *Number*, *Mood* and *Tense*.

By the *Person of a Verb*, we mean no more than those particular Terminations, by which the Person acting or suffering in each Number is denoted; as *I love, thou lovest, he loveth, or loves, &c.* As to *Number*, that follows of Course in Verbs; for the Agent must be *one* or *more*; but the Plural, in our Language, is wholly expressed by the *personal Pronouns we, ye, they.*

The MOODS or MODES of speaking are, in our Tongue, no more than Four, viz. 1. The *Indicative Mood*, which barely indicates the Action without Regard to the *Manner how*; as *I love, thou readeſt, he heareth, they walk, &c.* 2. The *Subjunctive Mood*, is that in which the Verb is subjoin'd to, or depends on some other Verb in the Sentence; as, *you will repent, if you perſiſt.* 3. The *imperative Mood* commands, exhorts, intreats, &c. As *learn thou, let them read.* 4. The *infinitive Mood* is that wherein the Action of the Verb is expreſſed in an *indefinite Manner*; and is always preceded by the Particle (*to*) as, *to write, to love, to learn, &c.* To theſe ſome add the *Potential Mood*, known by the Words *may, might, can, could, &c.* As, *I can read, I may hear.* Alſo the *Optative Mood*, by which we *wiſh, deſire, aſk, exclaim, &c.* As *O, that I might learn!* &c. But it is evident, that all the Moods are expreſſed by *little, ſubſervient, or auxiliary Words or Verbs*, and by any different Terminations of the principal Verb itſelf, as is done in other Languages.

By the TENSES of Verbs, are meant the Times in which their Actions are perform'd; of theſe there are properly but *three*, viz. The *Preſent*, as *I love, or do love*; the *Paſt*, as *I did or have loved*; and the *Future*, as *I ſhall or will love.* But the paſt or preter Tense is uſually ſubdivided into three, viz. The *Preter-imperfect*, which denotes the Time paſt but not finiſh'd, as *I did write*; the *Preter-perfect*,

Of ENGLISH GRAMMAR. 105

perfect, which denotes the Time perfectly past; as, *I have written*, and the *Preter-pluperfect*, which denotes the Time past, before the Time of some other past Action; as *I had heard it before you related the Fact*.

From whence it appears also, that the *Tenses* are not form'd in our Tongue by different Terminations of the Verb, as in others; but by Means of the *auxiliary Verbs*, *do*, *did*; *have*, *had*, *shall* and *will*. All which will be made very manifest, by expanding or conjugating the Verb through all its *Moods* and *Tenses* in the following Manner.

The INDICATIVE MOOD.

PRESENT.

	<i>Active Voice.</i>	<i>Passive Voice</i>
<i>Sing.</i>	$\left\{ \begin{array}{l} \text{I love, or do love} \\ \text{Thou lovest, or do'st love} \\ \text{He loveth, or doth love} \end{array} \right.$	$\left\{ \begin{array}{l} \text{I am loved} \\ \text{Thou art loved} \\ \text{He is loved} \end{array} \right.$
<i>Plur.</i>	$\left\{ \begin{array}{l} \text{We love, or do love} \\ \text{Ye love, or do love} \\ \text{They love, or do love} \end{array} \right.$	$\left\{ \begin{array}{l} \text{We are loved} \\ \text{Ye are loved} \\ \text{They are loved} \end{array} \right.$

The IMPERFECT.

<i>Sing.</i>	$\left\{ \begin{array}{l} \text{I loved, or did love} \\ \text{Thou loved'st, or did'st love} \\ \text{He loved, or did love} \end{array} \right.$	$\left\{ \begin{array}{l} \text{I was loved} \\ \text{Thou wast loved} \\ \text{He was loved} \end{array} \right.$
<i>Plur.</i>	$\left\{ \begin{array}{l} \text{We loved, or did love} \\ \text{Ye loved, or did love} \\ \text{They loved, or did love} \end{array} \right.$	$\left\{ \begin{array}{l} \text{We were loved} \\ \text{Ye were loved} \\ \text{They were loved} \end{array} \right.$

The PRETERPERFECT.

Sing.	{	I have loved	{	I have been loved
		Thou hast loved		Thou hast been loved
		He hath loved		He hath been loved
Plur.	{	We have loved	{	We have been loved
		Ye have loved		Ye have been loved
		They have loved		They have been loved

The PLUPERFECT.

Sing.	{	I had loved	{	I had been loved
		Thou hadst loved		Thou hadst been loved
		He had loved		He had been loved
Plur.	{	We had loved	{	We had been loved
		Ye had loved		Ye had been loved
		They had loved		They had been loved

The FUTURE.

Sing.	{	I shall, or will love	{	I shall or will be loved
		Thou shalt or wilt love		Thou shalt or wilt be loved
		He shall or will love		He shall or will be loved
Plur.	{	We shall or will love	{	We shall or will be loved
		Ye shall or will love		Ye shall or will be loved
		They shall or will love		They shall or will be loved

The SUBJUNCTIVE MOOD

The PRESENT

<i>Active Voice.</i>		<i>Passive Voice.</i>		
<i>Sing.</i>	{ I may or can love	{ I may or can be loved	{ Thou may'st or can'st be loved	
	{ Thou may'st or can'st love			{ He may or can be loved
	{ He may or can love			
<i>Plur.</i>				

Of ENGLISH GRAMMAR. 107

<i>Plur.</i>	{ We may or can love	{ We may or can be loved
	{ Ye may or can love	{ Ye may or can be loved
	{ They may or can love	{ They may or can be loved

The IMPERFECT.

<i>Sing.</i>	{ I might or could love	{ I might or could be loved
	{ Thou might'st or could'st love	{ Thou might'st or could'st be loved
	{ He might or could love	{ He might or could be loved
<i>Plur.</i>	{ We might or could love	{ We might or could be loved
	{ Ye might or could love	{ Ye might or could be loved
	{ They might or could love	{ They might or could be loved

The PRETERPERFECT.

<i>Sing.</i>	{ I might have loved	{ I might have been loved
	{ Thou might'st have loved	{ Thou might'st have been loved
	{ He might have loved	{ He might have been loved
<i>Plur.</i>	{ We might have loved	{ We might have been loved
	{ Ye might have loved	{ Ye might have been loved
	{ They might have loved	{ They might have been loved

The FUTURE.

<i>Sing.</i>	{ When I shall love	{ When I shall be loved
	{ Thou shalt love	{ Thou shalt be loved
	{ He shall love	{ He shall be loved
<i>Plur.</i>	{ We shall love	{ We shall be loved
	{ Ye shall love	{ Ye shall be loved
	{ They shall love	{ They shall be loved

The IMPERATIVE MOOD.

The PRESENT.

<i>Sing.</i>	{ Let me love	{ Let me be loved
	{ Love thou, or do thou love	{ Be thou loved
	{ Let him love	{ Let him be loved
<i>Plur.</i>	{ Let us love	{ Let us be loved
	{ Love ye, or do you love	{ Be ye loved
	{ Let them love	{ Let them be loved

The

The INFINITIVE MOOD.

Present Tense———To love
 Perfect———To have, or had loved
 Future———To be about to love.

PARTICIPLES.

Active———loving
 Passive———loved.

And these are all the Varieties of Circumstances in Regard of *Person*, *Mood*, or *Tense*, in which a Verb can be used; and what is here called a Participle, is that State of a Verb, in which it partakes of the *Nature of a Noun Adjective* also; for it is plain, that the Words *loving*, and *loved*, are declined and compared all one as any other *Noun Adjective*; for we say *a loving Husband*, *of a loving*, *to a loving*, &c. also *loving*, *more loving*, *most loving*.

And here it is of the last Importance to observe, that the Participle of the Passive Voice, *loved*, is principally used for expressing all the Variety of Mood and Tense in the Passive Voice of a Verb, and in a great Part of the Active; and therefore, if all our Verbs were regular, and form'd their *Positive Participle* by (*ed*) as above, there would be very little Difficulty or Trouble to the Learner, in acquiring a very good Idea of *English Grammar* in a short Time.

But this is far from being the Case, no Language perhaps being so irregular in forming the *Passive Participle* as our own; nor is this all that perplexes the Learner or Foreigner; for they find, that the *Preter Tenses* do not always follow the general Rule,
 in

Of ENGLISH GRAMMAR 109

in taking the *Passive Participle*, as in the Verb above, *I have loved, I had loved*; but that the *Theme* or *Verb* puts on a different Form for this Purpose; and that too, without any Regularity at all. Thus instead of

PRESENT. PERFECT. PASSIVE.

Saying, I write, I have writed, I am writed;
We say, I write, I wrote, I am writen.

And sometimes we make use of a different Form for the *Preterit Tense*, and sometimes take the *Passive Participle* of the same Verb, which still creates Ambiguity, and increases the Difficulty; thus we say, *I wrote, or did write; I have wrote, or I have writen*. And there is no Way to help the Learner in this Case, but by setting before him a View of the irregular Verbs in Alphabetical Order, in two Tables; the first of which has the *Preter Tense* and *Participle Passive* both the same; and in the Second, they have each a different Form.

TABLE I.

	<i>Preter Tense</i>		<i>Preter Tense</i>
<i>Present.</i>	<i>Particip. Pas.</i>	<i>Present.</i>	<i>Particip. Pas.</i>
awake	awoke	fraight	fraught
abide	abode	geld	gelt
be	been	guild	gilt
bend	bent	gird	girt
bereave	bereft	grind	ground
beseech	befought	hang	hung
bind	bound	have	had
bleed	bled	hear	heard
breed	bred	keep	kept
bring	brought	lay	laid
buy	bought	lead	led

catch

<i>Preter Tense</i>		<i>Preter Tense</i>	
<i>Present.</i>	<i>Particip. Pas.</i>	<i>Present.</i>	<i>Particip. Pas.</i>
catch	caught	leave	left
creep	crept	leap	lept
deal	dealt	lend	lent
dig	dug	lose	lost
dream	dreamt	make	made
dwell	dwelt	mean	meant
feed	fed	meet	met
feel	felt	rend	rent
fight	fought	say	said
find	found	seek	sought
flee	fled	sell	fold
fling	flung	send	sent
shine	shone	sting	stung
fit	fat	sweep	swept
sleep	slept	teach	taught
smell	smelt	tell	told
spell	spelt	think	thought
spill	spilt	weep	wept
spend	spent	wind	wound
spin	spun	work	wrought
stand	stood	wring	wrung
stick	stuck		

Sometimes we meet with a few of these Words, declined with a regular *Preter Tense* and *Participle*; as *beseched, digged, gelded, gilded, girded, worked, &c.* but these are rarely or never used by the modern, and more elegant Authors.

Of ENGLISH GRAMMAR: III

TABLE II,

Present Tense. Preter Tense. Participle Pas.

bear	bore, or bare	born
begin	began	begun
bid	bid, or bad	bidden
beat	bent	beaten
bite	bit	bitten
blow	blew	blown
break	broke	broken
chide	chid	chid, or chidden
chuse	chose	chosen
cleave	cleft, or clove	cleft, or cloven
come	came	come
crow	crew	crow'd
dare	durst	dar'd
die	died	dead
do	did	done
draw	drew	drawn
drink	drank	drunken
drive	drove	driven
eat	eat	eaten
fall	fell	fallen
fly	flew, or fled	flown, or fled
forfake	forsook	forfaken
freeze	froze	frozen
get	got	gotten
give	gave	given
grow	grew	grown
help	helpt	holpen, or helpt
hew	hewed	hewn
hide	hid	hidden
hold	held	holden
know	knew	known
lie	lay	lain

mow

Present Tense. Preter Tense. Participle Pass.

mow	mowed	mown
ride	rid	ridden
ring	rang	rung
rise	rose	risen
run	ran	run
see	saw	seen
seethe	sod	fodden
shake	shook	shaken
shear	shore	shorn
shew, or show	shewn, or shown	shown
shoot	shot	shot, or shotten
shrink	shrank	shrunken
sing	sang	sung
sink	sank	sunk
slay	flew	slain
slide	slid	slidden
sling	slung	slung
smite	smote	smitten
snow	snowed	snown
sow	sow'd	sown
speak	spoke	spoken
spring	sprang	sprung
steal	stole	stolen and stole
stink	stank	stunk
strike	struck	struck, or stricken
spit	spat	spitten
strive	strove	striven
swear	swore	sworn
swell	swell'd	swoln, or swell'd
swing	swang	swung
swim	swam	swum
take	took	taken
tear	tore	torn
thrive	throve	thriven

throw

OF ENGLISH GRAMMAR 113

Present Tense.

Preter Tense.

Participle Pass.

throw

threw

thrown

tread

trod

trodden, or trod

win

won and wan

won

wear

wore

worn

weave

wove

woven

write

writ or wrote, written, writ & wrote

III. OF ADVERBS.

ADVERBS are that Sort of Words which in a Sentence are joined to the *Verb* or *Noun*, to shew the *Manner*, *Time*, *Place*, or other Circumstance of its Signification. They are therefore distinguished into several Kinds, as follows: 1. Those which express the *Manner* or *Quality*, and are made of Adjectives, by adding (*ly*) as *wisely*, *happily*, *warily*, *swiftly*, *lowly*, &c. 2. Adverbs of *Time*; as, *now*, *presently*, *lately*, *yesterday*, *daily*, *seldom*, *ever*, *never*, *anon*, &c. 3. Adverbs of *Place*; as, *here*, *there*, *within*, *without*, *upwards*, *downwards*, *thither*, *hither*, *thence*, *hence*, *above*, *below*, *this way*, *that way*, &c. 4. Adverbs of *Number* or *Order*; as, *once*, *twice*, *thrice*; *first*, *secondly*, *thirdly*, *finally*, *lastly*, &c.

But this Article of Adverbs is, I think, too inconsiderable, to make a *distinct Part of Speech*; they might very well be classed under the Head of *Adjective Nouns*, as a Species thereof; which is plainly indicated both by their *Significations* and admitting *Degrees of Comparison*; as *happily*, *more happily*, *most happily*; especially all that Part which is derived from Adjectives; and the rest should be referred to the following Head.

IV. Of

IV. Of PARTICLES.

THE Words which come under this Denomination, are those small invariable Words which Grammarians usually call CONJUNCTIONS, PREPOSITIONS, and INTERJECTIONS. The first Sort, are all those which serve to conjoin or connect the several Words or Parts of a Sentence together, and thereby shew their Dependence on one another. They reckon several Sorts of these ; as, 1. COPULATIVES ; *and, with, for, by, &c.* 2. DISJUNCTIVES ; as, *or, either, nor, neither, &c.* 3. CONCESSIVES ; as, *yet, albeit, though, although, &c.* 4. ILLATIVES ; as, *since, seeing, therefore, wherefore, &c.* 5. CONDITIONALS ; as *if, provided, if indeed, &c.* 6. EXPLETIVES ; as *now, for, truly, indeed, forsooth, &c.* And after this Manner, they enumerate divers other Species.

PREPOSITIONS are those small Words, or Particles which are prefixed to *Nouns*, to indicate the Case, or particular State or Relation in which they are used and related to each other ; these Prepositions are, *a, the, of, to, in, with, by, from, than, above, about, after, against, among, at, between, beyond, for, on, upon, till, until, toward, within, without, &c.*

INTERJECTIONS make the Expressions of our Joy, Sorrow, Grief, &c. by Way of Exclamation ; as, *O brave ! ah ! alas ! O strange ! away, phy ; ha, aha ; hark, hush ! avant, wee be to you, God grant, God forbid ! &c.* These are but very few in Number, and make the smallest Part of our Language.

From

Of ENGLISH GRAMMAR. 115

From what has been said, it will easily appear, that these small Words or Particles are of the utmost Consequence in Speech, in as much as all the *Beauty, Elegance, and Decoration* of Discourse depend upon them; for though it be easy barely to indicate the Action, or Thing; yet to describe it in all its Circumstances, and to represent it with all the Embellishments of Diction, requires no small Art and Dexterity in the Use of Particles.



THE
R U L E S
O F
S Y N T A X I S;
O R,

The due CONSTRUCTION of WORDS
in SENTENCES.

SYNTAX is the proper Construction, or due Disposition of Words in *Sentences*; a *Sentence* consists at least of two Words, by which some Sentiment is expressed, or some Action declared; as *Jesus wept*; but it mostly consists of three or more; as, *God hateth Liars*; *God is angry with the wicked every Day*. In a Sentence, there is always a *Noun* which is the *Subject*, and a *Verb* which affirms something concerning it; as *a Lie is abominable*.

SYNTAXIS consists of two Parts; 1. CONCORD, or the Agreement between the *Noun* and the *Verb*, in Respect of Person and Number; and 2. GOVERNMENT, which is, when one Word requires another to be put into some special Case; as when we say, *the Voice of a Man*, the Word *Voice* governs the Word *Man* in the *Genitive Case*; *I write a Book*, the Word or Verb *write* governs
an

OF ENGLISH GRAMMAR: 117

an *accusative Case* of the *Word Book*. The Rules directing us in this Affair are the following.

I. The indefinite Particle *a* is placed before a Word beginning with a Consonant, and in the singular Number only, as a *Man*, a *Horse*; but if the Word begin with a Vowel, we use the Particle *an*; as *an Artist*, *an Owl*, &c. but the Preposition *the*, is used before Nouns in both Numbers, as *the Man*, *the Men*, &c.

II. The Verb must agree with the Noun in *Number and Person*; as *I read*, *thou readest*, *we read*; not *I reads*, *thou read*, *we reads*; which is false Concord, or bad *English*.

III. The Custom of the *English* has prevailed of late, to use the plural Pronoun of the second Person, for the second Person singular, viz. *you* for *thou*; and in this Case, the Verb must be Plural too; as *you are merry* for *thou art merry*.

IV. If two Nouns or Pronouns precede the Verb, with a Conjunction between them, though they are each of the singular Number, they will have a plural Verb; as, *he and I are two*, not *am* or *is* two. The King and Queen *reign*; not *reigns*, or *reigneth*.

V. Those Nouns which are call'd *collective*, or which signify many Particulars under the singular Form; as *People*, *Flock*, *Committee*, &c. may have either a singular or plural Verb; as, who minds what the *Vulgar says*, or what the *Vulgar say*. The Committee *has* or *have* examined the Prisoner.

VI. The Particles *if*, *that*, *though*, *when*, &c. have the Verb Plural of the Subjunctive Mood to a singular Noun; as, if the *Case require* it; he will dare,

dare, though *he die* for it. But this is not always observ'd by good Writers.

VII. When a Question is asked, the Noun is put after the Verb; as, *is Peter living? Are you in earnest?*

VIII. So likewise, in exhorting, commanding, exclaiming, &c. as, *read thou; hear, O ye Heavens, and give Ear, O Earth!*

IX. Any Sentence, or Matter, being the Subject of the Verb, requires the Verb to be put in the singular Number; as, *early rising is healthy, to be learned is honourable.*

X. When two Nouns of different Numbers are connected in a Sentence by a Verb, the Verb generally agrees in Number with the *nearest*. *Nothing is wanting there, but Charms. Riches are often a Snare to Men.*

XI. If two Verbs pertain to a Noun, the Noun is placed between them; as, *could you have thought it?*

XII. Adjectives, in our Tongue, are placed before their Substantives; as, *I like your House; a good Name is the most noble Possession.*

XIII. Unless when two are conjoin'd, and expressed emphatically; as *a Man both wise and valiant; a Woman virtuous as fair.*

XIV. Adverbs are placed *before* Adjectives; as *he was very lucky*; but after the Verbs; as *he acted discreetly; Celia danced finely.*

XV. *Rhetoric* and *Poetry* very often make Use of what is called *Figurative Construction*, that is, the placing of Words contrary to their natural Order;

as,

Of ENGLISH GRAMMAR. 199

as, *in the Beginning was the Word*; for the *Word was in the Beginning*. Hear, *O ye Heavens*, for *O ye Heavens*, hear! And in Poetry,

*The Wrath of Peleus' Son, the direful Spring
Of Woes unnumber'd, heav'nly Goddeſs ſing!*

Of which the *natural Order* is this;

Sing, heavenly Goddeſs, the Wrath of *Achilles* (the Son of *Peleus*) which proved the direful Spring of unnumber'd Woes.

These are the Principal Articles relating to *Engliſh Syntaxis*; which is much more ſimple and eaſy than what is to be found in moſt other Languages; but in vulgar Speech, we are very apt to tranſgreſs theſe Rules; and it is thought, but too much, the *Buſineſs of the Learned* only to obſerve them, that is, to write and ſpeak correctly. But this ſcandalous Miſtake, the *ingenious Britiſh Youth* ſhould avoid with the utmoſt Detestation.



THE
R U L E S
O F
O R T H O G R A P H Y,
F O R

Writing in a correct and elegant STYLE.

THE foregoing RULES of SYNTAXIS, make a principal Part of *English Orthography*, or *the Art of Writing correctly*; but as meer Grammar is not sufficient for the *Orator* and *polite Writer*, it will be necessary to lay down a few more Rules, which Custom (the sovereign Law of Language) has establish'd for *Speaking* and *Writing* the *English Language* at present.

RULE I. There ought to be no more Letters wrote in a Word, than are some Way necessary to qualify the Sound, according to the present Usage. And therefore, when (*k*) follows (*c*) at the End of the Word, it ought to be rejected, as redundant; thus *Musick*, *Logick*, &c. should be wrote *Music*, *Logic*, &c.

RULE II. The auxiliary Verb, *do*, *did*, should not be used before Verbs in general, but only where the Sense is required to be expressed very explicitly

OF ENGLISH GRAMMAR. 121

and emphatically ; as, *I write, I wrote* ; not, *I do write, I did write* ; unless when we answer a Charge, Command, Question, &c. as, *you ought to write, you should have wrote, &c.* and then the Emphasis requires it. For when we say, *I do write*, it is a Sort of doubly affirming the Thing.

RULE III. The *Participle Passive* should in Writing be retain'd, in its proper Form, as, *loved, placed, stuffed, &c.* Though Custom has greatly prevail'd against this Rule, and has contracted these Words into one Syllable, by rejecting the (*e*) and taking an Apostrophe (') in Place of it, thus ; *lov'd, plac'd, stuff'd, &c.* in Speaking we go farther, and change the (*d*) into (*t*) after *c, ch, sh, f, k, p, f, th, x* ; as, *plac't, snatch't, wish't, stuff't, clapt, mix't, &c.* and sometimes after *l, m, n, r* ; as, *dwel't* for *dwel'd, &c.*

RULE IV. If a proper Diphthong, or long Vowel precede, the Apostrophe (') is omitted ; as from *keep, kept ; sleep, slept ; leap, lept ; leave, left, &c.* all which Contractions and Coalitions of Syllables, tho' they tend to a quicker Pronunciation, yet they clog the Language with Consonants, in which it is thought to abound too much already.

RULE V. In Verbs that end in (*y*) either take (*d*) with an Apostrophe, as *signify, signify'd ; marry, marry'd, &c.* or turn the (*y*) into (*i*), and take the regular Form of the Participle thus, *signified, married, &c.* and this in Writing, is much the more elegant Way.

RULE VI. The same Disposition to Quickness of Expression has introduced the following Contractions, as, *'tis, 'twas, 'twill, &c.* for *it is, it was, it will, &c.* yea farther, we say, *it's*, for *of it, or it is* ; *I'll*, for *I will* ; *I won't*, for *I will not* ;

shan't, for *shall not*, &c. but these Abbreviations so far deface our Tongue, that Strangers who learn the Grammar, can scarcely by that Means only read or understand a Sentence in it afterwards. These Contractions therefore, in Writing, should be avoided as much as possible. And it is Pity to see them used (even to Affectation) by some of our celebrated Writers.

RULE VII. The true and natural Analogy of Language should be studiously observed in Writing; not writing *sedat*, *animat*, &c. for *sedate*, *animate*; or *loveing*, *animateing*, &c. for *loving*, *animating*. Though the Examples as of learned Men are not wanting to countenance these, and such like Deformities of Speech.

RULE VIII. Again, Custom (for the Reason aforesaid) has introduced a Contraction of the Terminations (*est*) and (*eth*) in the second and third Persons singular of Verbs; for instead of *lovest*, *loveth*, we say, *thou lov'st*, *he loves*. But though this be allowed in Speaking, it is still more genuine and elegant to write the proper Form of the Verbs, *thou lovest*, *he loveth*; *thou readest*, *he readeth*, &c.

RULE IX. Though we have many *Idioms*, or customary Ways of Expression, which are peculiar to particular Counties, and allowable in common Speech; yet these must be studiously avoided in *Writing* and *Oratory*; because, in all such Cases, the Diction should not be debased with *Vulgarisms* of any Kind. Thus instead of saying, *thou Oaf*, *tine* the Candle; *thesefom peasen*, black as the *Habbern*, &c. we write, *thou Fool*, *snuff* the Candle; *these Pease*, black as the *Chimney*, &c.

RULE X. In many Cases, Custom has established an *cliptic Diction*, or Way of Speaking, in which

OF ENGLISH GRAMMAR 123

which some Word is omitted, which must be understood in good Construction; as, *I dare say*, for, *I dare to say*; *St. Paul's was not built in a Day*; where the Word *Church* is understood. So, *past one*, is used for *past one o' Clock*; and *Six per Cent*, for *six Pounds per Cent*. But here we ought not to venture farther than we can be justified by Custom and Reason; for it is just as elegant to say, *she scolds me*, as it is to say, the *Dog barks me*, where the Particle *at* is very absurdly left out.

RULE XI. On the other Hand, we ought to avoid as much as possible, both in *Writing*, and *Oratory*, the Use of all *obsolete and technical Words or Terms*; for they are generally unintelligible, and always unpleasant to a common Eye or Ear; they make our Discourses insignificant and irksome; and instead of procuring us the Reputation of *Scholars* and *Orators*, they too justly render us suspected of *Pedantry* and *Affectation*. But to this Rule, however, we must except Discourses on the *Mathematical and Philosophical Arts and Sciences*; for to treat of them without the *Terms of Art*, would be to strip them naked, and expose them to the Contempt of the Vulgar. Though even here, we must be as sparing of them as the Nature of the Thing will admit of.

RULE XII. Again, that our Style may be truly elegant and oratorical, we ought always to be very careful to adapt the Expression to the Nature of the Thing expressed, or to make such a Choice of Words as may bear a Resemblance, as much as possible, both in Sound and State, to the Nature of the Subject we discourse of. Thus, if we describe the *Night*, our Words must be *soft and silent*, and as *expressive* of *Gloom* and *Horror* as possible; if we would set forth the *Beauties and Blessings* of the *Spring*, our Style

must then be *easy, gay, and elevated, enlivened* with all the *Sweetness*, and *embellish'd* with the most agreeable *Flowers of Rhetoric*. If we describe a *Storm*, the *boisterous Sea*, the *Onset of Armies*, &c. Our Words must be *rough, hollow, harsh, sonorous*, and as it were expressing the *Clangor* of the Subject. *Lastly*, if we treat of exalted Subjects, as *Heaven*, the *Deity*, &c. Our Discourse must be such as will express most naturally the *great, grave, solemn and sublime* Ideas we are to communicate. Having, in all Cases, a Regard to the *Nature, State, and Dignity* of the Subject, we shall be the better able to write with *Ease and Perspicuity* upon it.

*The RULES and METHOD of READING and
SPEAKING WELL, and with a JUST ELO-
CUTION.*

THE Method, or Art of *Reading or Speaking well*, or with a *just and natural Expression*; or *Elocution*, depends on a due Understanding the following Things.

I. The true Nature and Rules of *accenting Words*; since nothing is more harsh and disagreeable to the Ear, than to hear a Person speak or read with *wrong Accents*. But as this is a Matter of universal and great Importance, and not to be obtained but by Practice; I have taken care to accent all the Words in the foregoing Alphabets, both with *single and double Accents*, for their due Utterance and Expression; and by carefully reading, observing, and remembering these, the Scholar will be enabled to attain a good Perfection in this Respect. But I must here add, that since the same Word is very

OF ENGLISH GRAMMAR. 125

often both a *Noun* and a *Verb*, so it requires a *different Accent*, or Stress of the Voice; that is, when it is a *Noun*, or Name, the Accent is on the first Syllable; but on the last, when it is a *Verb*, or signifies Action; as is evident in the following Examples.

N O U N S.

Absent,
Accent,
Cement,
Convert,
Ferment,
Incense,
Object,
Present,
Record,
Subject,
Torment,
Unite,

V E R B S.

To Absent,
To Accent,
To Cement,
To Convert,
To Ferment,
To Incense,
To Object,
To Present,
To Record,
To Subject,
To Torment,
To Unite.

II. We are to observe, that in order to a just Expression of Words, some require only a single Accent, which denotes the Syllable which is to be pronounced long, and that only; as in *Absent*, *Cement*, *Torment*, &c. But the double Accent is used to denote, that a certain Letter in many Syllables, though wrote but *once*, is sounded as if it were double, or wrote twice; thus the Letter (*n*) in *Animal*, is sounded double, as if it were wrote *An-nimal*; and in all these Cases, such Letters are mark'd with a double Accent, as *An[^]imal*, *Acce[^]lerate*, *Pre[^]sent*, &c. As you observe in many of the Words of the foregoing ALPHABETS. And, unless the Scholar be very careful in this Particular, his Expression or Delivery will be vicious and very disagreeable.

III. As in *Prose*, so more especially the Business of Accenting is concern'd in *Poetry*; for it is in this,

that their specific Difference does chiefly consist in the *English* Tongue. For an *English* Verse, in general, is only a Line of ten Feet, each Foot consisting of a short and a long Syllable alternately throughout (which Feet were by the *Latins* call'd *Jambics*.) As in the following Verses.

'Tis hard to say, if greater Want of Skill
Appear in Writing or in judging ill.

Indeed, this Distinction of short and long Syllables, is in Poetry usually call'd *Quantity*, but I cannot find that it is in *English* any different Idea from what we call *Accent* in Prose; and therefore, I have chose to consider it under that Appellation.

IV. For what is, or should be call'd *Quantity* in *English*, both Prose and Verse, I take to be a greater or less Continuation of the Voice in pronouncing the same Word or Syllable; sometimes the Expression is *quick* and *short*, sometimes *long* and *slow*, according as the Nature of the Thing, or the Rhyme of the Verse requires. I shall only here observe, that there is a Sort of *Rhymes*, or *Harmony of Notes* and *Sounds* in *Prose* as well as *Verse*, which depends on the Quantity of Expression as to *long* and *short*, *loud* and *low*, *grave* and *acute*, nearly the same as in *Music* it self, which is nothing but a just *Modulation of Sounds*, abstracted from verbal Expression. And it cannot be denied, but that a *Notion of the Grounds of Harmony* and a *musical Ear*, are in a great Measure necessary to enable a Person to read and speak with a proper Elocution and Melody of Voice.

V. There is yet another very important Article to be well observed in the *Art of Reading and Speaking* well; and that is, what we commonly call *EMPHASIS*. And this is a particular Force or *Stress of Voice*, considerably elevated, upon that Word in a Sentence, by which the Sense of the whole is determined.

For

Of ENGLISH GRAMMAR. 127

For a Sentence may be capable of different Significations, according as the EMPHASIS is placed on the different Words which compose it. Thus, for Example, suppose the Question were ask'd—*Are you determin'd to walk this Day to London?* Here may be a Variety of Answers accordingly as the EMPHASIS is placed on different Words; for (1.) If the EMPHASIS be placed on the Word *You*, the Answer may be, Yes, I go myself; or, No, I shall send my Son. (2.) If it be on the Word *determin'd*; the Answer is, Yes, I am; or, No, I am not determin'd yet. (3.) If it be laid on the Word *Walk*, the Answer may be, No, I shall *ride*. (4.) If on the Word, *to Day*; the Answer may be, Yes; or No, I shall go *To-morrow*. (5.) If the EMPHASIS be placed on the Word *London*; the Answer may be, No, I shall go *to Richmond* only.

VI. From what has been said, we may observe how necessary it is to take the greatest Care to avoid that vicious Pronunciation which we call a MONOTONY, or that even, equable Tone or Tenour of the Voice, which neither rises nor falls; and of Course, in which there can be no such Thing as *Accent*, *Quantity*, or *Emphasis*; and consequently, no Harmony or Melody of Utterance, nor scarcely any Sense to be made of what a Person of such an unhappy Deliverance shall read or speak. Without *Accent* and *Emphasis*, the Diction is insipid, lifeless, and unaffecting; and to a judicious Ear extremely irksome and disagreeable.

VII. To conclude this Article, there is no Possibility of a Person's *Reading well*, or *Speaking with a proper Grace*, without a competent Knowledge of the *Subject* on which he discourses; for unless the full Force and Meaning of every Word and Sentence be understood, we cannot express it usually with a proper *Accent* and *Emphasis*. We may as reasonably

pretend to read *Latin* or *Greek* without understanding it, as to discant upon any Subject we know little or nothing about.

In short, nothing but a Knowledge of the Language we speak, and of the Subject we treat, can ever qualify a Person to merit the Character of an *Author*, a *Lecturer*, or an *Orator*.

Of SENTENCES and PERIODS; STOPS, or
POINTING; and CHARACTERS, and AB-
BREVIATIONS explained.

THE last Thing necessary to compleat the *English Scholar* in respect of Language, is what may be very properly call'd the *Art of Composition*, or the making a *Discourse* of *Periods* and *Sentences*, in like Manner as *Words* are form'd of *Syllables* and *Letters*. In order therefore to compose, write, or read a *Discourse* well on any Subject, the Doctrine of *Sentences* and *Periods*, and the Business of *Pointing* must be first understood.

SENTENCES are either *single* or *compound*; a single Sentence must contain a *Subject* or *Noun*, and a *Verb* which affirms something of it; as, *Jesus wept*; *the Sun shines*; *Life is short*; *Art is long and difficult*, &c. Hence a single Sentence generally contains three Words, a *Noun*, a *Verb*, and another Word that expresses what the Verb affirms of the Noun or Subject.

A *compound Sentence* contains two or more single ones; and therefore, must contain at least, two Nouns and one Verb, or two Verbs and one Noun; as, *Arms and the Man I sing*; *Mira both sings and plays on Music finely*. *Wit and Wisdom are*
two

two very different Things. Wisdom is always found of those who seek her.

Of Sentences single and compound are form'd PERIODS, which as they cannot consist of less than two Syllables or Members, so they should not have more than four; because a long Period requires not only too great a Stretch or Force of Voice, but when its Numbers or Parts are many, the Ideas are not so easily discerned and remembered; and must therefore be attended with Difficulty to the Speaker, and Confusedness and Tedioufness to the Audience; and so the Discourse, consisting of long Periods, never fails of meeting with a cold and disagreeable Reception.

As the Members of a compleat Period are four; so they are denoted by four different Marks, Points, or Stops, as they are usually called, viz. 1. The Comma (,). 2. The Semicolon (;). 3. The Colon (:) and 4. The Period or full Stop (.) For, in order that the Expression and Sense may be distinct, the whole Period is not to be pronounced in one Breath, but several; pausing more or less at each Sentence, or Part, as the Nature of the Subject requires.

The Comma is used when we pause but a little, or while you tell one; and is generally used to distinguish particular Names and Things; as, *the three Christian Virtues are Faith, Hope, and Charity; the four Evangelists, Matthew, Mark, Luke, and John.*

The Semicolon (;) is used to denote a Pausing twice as long, and next to the Comma, is most frequent; it is affixed to such Parts of a Period as have one or more Commas in them, and which contain but a Part of the Declaration of the Subject. As in this Period; *The Year consists of four Parts, or Seasons; the first, Spring; the second, Summer; the third, Autumn; and the fourth, Winter.*

The *Colon* (:) pauseth three Times as long as a *Comma*; and is used only to such Parts of a Sentence or Period, in which the Sense or Asseveration is compleatly finished, or does not enter into the following Parts. As, *In the Beginning, God created the Heavens and the Earth: and the Earth was without Form, and Void: and Darkness was upon the Face of the Deep.* In the first Part of this Period, the Subject is different from that of the second, which also differs from that of the third, and therefore at the End of each, a Colon is properly placed.

A full Point (.) or Stop, is placed only at the End of a Period, when the whole Declaration upon any particular Subject is finished, whether long or short. Besides these, there are several other Notes or Characters in the Orthography of most Languages, which here follow.

A Note of *Interrogation* (?) used always when we ask a *Question*; as *who? where? when?*

A Note of *Admiration* (!) as, *did you ever behold the like!* and to *Exclamations*; as, *hear, O Heavens! what an Age are we!*

An *Accent* (˘) denoting (with us) the Syllable in a Word on which the Stress of the Voice is to be laid.

An *Apostrophe* (') denoting the Coalition of two Words in one; as *I'll.* for *I will*; *mayn't,* for *may not.*

An *Asterism* (*) and *Obelisk* (†) which are used for referring to Notes in the Margin, or Foot of the Page.

A *Paragraph* (¶) and *Section* (§) are sometimes used when we begin a new Subject or Section.

A *Quotation* is (") represented by two inverted Commas.

Of ENGLISH GRAMMAR. 131

An *Hyphen* (-) is used to separate the Parts of compound Words, as *Lady-Day*, *God-head*.

A *Parenthesis* () and *Crotchet* [] are used to include an Expression in the Midst of a Sentence, of a different Import; as in the following; a Man without Learning and Religion, is (*I had almost said*) without Humanity.

The *Index* (☞) points to something very notable, and of great Importance.

Besides these, there are in Mathematical Sciences many Characters used by Way of Abbreviation; the chief of which are the following.

+ Signifies *Addition*, or *more*; as, $3 \div 2$, is 3 more 2.

— Signifies *less*; as $5 - 2$, is 5 multiplied by 2.

x *Multiplied*; as 5×2 , is 5 lessened by 2.

÷ *Divided by*; as $10 \div 2$, is 10 divided by 2.

= *Equal to*; as $5 \times 2 = 10$, or 5 multiplied by 2, is equal to 10.

⊙ Is a Note of *Involution*, or raising of Powers.

√ A Note of *Evolution*, or Extraction of Roots.

: Denotes a *Ratio*, or *Comparison* of two Quantities, as A and B, thus A : B.

:: Denotes an *Equality* of Ratio's, thus A:B::C:D, is in Words A is to B, as C is to D.

∴ Signifies, *therefore*.

⊃ Greater; as, A ⊃ B, A is greater than B.

⊂ Lesser; as, A ⊂ B, A is less than B.

|| Signifies two Lines are parallel to each other.

√ Signifies the Root of a Quantity, as, $\sqrt{A}$ is the Square Root of A; $\sqrt[3]{A}$, is the Cube Root of A, and so on.

- $\dot{x}$ The First.
 $\ddot{x}$ The Second. } Fluxion of the Quantity x .
 $\dddot{x}$ The Third

The Astronomers often represent the Sun and Planets by particular Characters, as follow.

- ☉ The Sun.
 ☿ The Planet *Mercury*.
 ♀ The Planet *Venus*.
 ● The *Earth* considered as a Planet.
 ♂ The Planet *Mars*.
 ♃ The Planet of *Jupiter*.
 ♄ The Planet *Saturn*.



PART III.

Containing PRAXES, or LESSONS on the following ARTS and SCIENCES, viz.

- | | |
|----------------|-------------------|
| 1 THEOLOGY. | 15 HYDROSTATICS. |
| 2 MORALITY. | 16 MECHANICS. |
| 3 PAGANISM. | 17 ARITHMETIC. |
| 4 MYTHOLOGY. | 18 GEOMETRY. |
| 5 RHETORIC. | 19 MUSIC. |
| 6 LOGIC. | 20 BOTANY. |
| 7 POETRY. | 21 PHARMACY. |
| 8 GEOGRAPHY. | 22 CHEMISTRY. |
| 9 CHRONOLOGY. | 23 ANATOMY. |
| 10 ASTRONOMY. | 24 PHYSIC. |
| 11 HISTORY. | 25 CHIRURGERY. |
| 12 PHYSIOLOGY. | 26 JURISPRUDENCE. |
| 13 PNEUMATICS. | 27 HERALDRY. |
| 14 OPTICS. | |
-

PRAXIS I.

On THEOLOGY.

THEOLOGY is that Science which contemplates the Nature and Perfections of God, or the *Deity*; discovers his Attributes to Mankind, the Relation we stand in to him, as our Creator; and the various Duties we owe to him and one another, in consequence of such a Relation.

The *Existence of the Deity* is not so easy (if at all) proved by Arguments *a Priori*, that is, from the *Nature and Necessity of Things*; but nothing is more evident and demonstrable *a Posteriori*, i. e. from a View, of the Works of Creation; and the Use, Dependency, and Design of Things, which is called the Doctrine of *final Causes*.

All Men in general agree about the *Existence of a Divine Being*, and that he is possessed of infinite Perfections; as *Omnipotence, Omniscience, Omnipresence, Goodness, Mercy, Justice, Truth*, and every other Perfection in the highest Degree. That he is necessarily *self-existent, eternal, and unchangeable*; but whether there be *one Person* only in the Godhead, (as the *Unitarians* hold) or *three*, (as the *Trinitarians* teach) or what may be the *Mode of Existence* in the Deity, undoubtedly no Mortal can tell.

The Notions we have of a Divine Being naturally inspire us with Sentiments of *Devotion, Reverence, Worship, and Adoration*. And as far as this proceeds from the Ideas we have from the Light of Nature and Reason, it is called *Natural Religion*. But whatever is revealed to us by any immediate Inspiration, or any special Messenger from God, we call *Revealed Religion*.

The several Nations of the World, who are not directed by Revelation, are called *Pagans*; and their Methods of Worship *Paganism*; and because they represent the Deity under several Forms, or *Idols*, it is also called *Idolatry, Image-Worship*.

But several Nations lay claim to Revelation, particularly the *JEWS, CHRISTIANS, and MAHOMEDANS*. The *JEWS* believe *Moses* was divinely inspired, and received his Revelation of the *Ceremonial and Moral Law*, in five Books, which they call the *Pentateuche, or Torab*. The Explanation of which they call the *Targum*. Besides this, they have what they

they call the *Talmud*, or Laws by *Oral Tradition*; the Text of which is called the *Misehnah*, and the Commentary upon it, the *Gamera*. The Places consecrated to public Worship among the *Jews*, were the *Tabernacle*, the *Temple*, the *Synagogue*, and the *Proseucha*, or *Oratory*. And the religious Orders of Men appointed to perform Divine Service, were the *High Priest*, the *Levites*, or *Common Priests*; the *Nethenims*, the *Elders*, the *Minister*, the *Charan*, or *Overseer*, and the *Interpreter* of the Language.

The Ritual or Ceremonial Part of the Worship consisted of a Variety of *Sacrifices*, or *Burnt-Offerings*; *Oblations*; *Ablutions*, and *Purifications*; *Libations*, or *Drink-Offerings*; *Praying*, *Preaching*, &c. They circumcised all the Male Children, and Proselytes to their Religion.

Among the *Jews* (as in all Religions) there were various *Seetaries*; as the *Samaritans*, the *Sadducees*, the *Karrites*, the *Pharisees*, the *Scribes*, *Nazarites*, *Rechabites*, *Esseens*, *Gaulonites*, *Herodians*, *Proselytes*, &c.

The CHRISTIANS were the next large Denomination of religious People; who are so called from their Belief in JESUS CHRIST, as the MESSIAH, or Person sent from God, to reveal his Will more clearly to Mankind, and to redeem Men from their lapsed or fallen State, to give them Hopes of a future and everlasting Life, by the Doctrine of the Resurrection from the Dead. These are the great Articles of the Christian Faith, and are to be learn'd from the Gospels, or Histories of the Evangelists, and the other Books of the New Testament, which are generally believed to have been wrote by Divine Inspiration.

The Place of public Worship among Christians, is call'd a *Church*, a *Cathedral*, if large, or a *Chapel*,
when

when small. The whole Body of the People are also called the *Church*. The *Ecclesiastics*, or Men of the *religious Orders*, are various, according to the different Sects, or Churches; thus the *Greek Church* has its *Patriarchs*, and *Priests*; the *Roman Church*, a *Pope*, *Cardinals*, *Monks*, *Friars*, *Abbots*, *Priests*, *Deacons*, &c. The *Church of England* has its *Arch-Bishops*, *Bishops*, *Arch-Deacons*, *Deans*, and *Priests* of various Denominations.

The Ritual of public Service is very different in different Churches; it abounds with Ceremonies of every Sort in the *Roman Communion*; but in the *English Church*, it consists chiefly of *Praying* and *Preaching*, which is performed in a different Manner among the many Sects of Protestants. The *Hierarchy*, or Government of their Churches, is in each of them also on a different Plan.

The MAHOMEDANS make the fourth and last great Division of religious People; they are so called from believing *Mahomed*, to be a true Prophet, sent from God to reveal his Will, in regard to the present Life and a future State; which is contained in a Book or Bible, they call the *Alcoran*, or (properly) the *Koran*. Their whole Doctrine is a ridiculous Jumble of *Heathenism*, *Judaism*, and *Christian Heresies*. Their Places of Worship are called *Moschs*; their *Priests*, *Mustis*; and their true Believers, *Mussulmen*. But their Imposture is so very gross, that none can teach it but those who find their Account in it; and none can believe it, but such as are weak enough to believe any Thing.

In every Religion, those, who make the greatest Body, are emphatically called the *Church*; and those, who separate from their Communion, on Account of differing Sentiments and Opinions, are sometimes called *Heretics*, or *Schismatics*, and sometimes

times by the milder Name of *Dissenters*. The Doctrine and Faith of the general or established Church is always supposed to be *true* or *right*, and therefore called *Orthodoxy*; and consequently those who think differently from them must be *Heterodox*; and their Principles looked upon as *heretical*.

P R A X I S II.

Of ETHICS or MORALITY.

ETHICS, or MORALITY (sometimes called MORAL PHILOSOPHY) is the Science which teaches the Discipline of *Manners*, and prescribes Rules for the Economy and Conduct of Human Life under all the Relations we stand in to the Divine Being, and to one another, in order to attain to the *Summum Bonum*, or greatest Felicity our Natures are capable of.

The fundamental Principle in Morality is the *natural Rectitude* of human *Actions*, that is, that every Action of our Lives should be directed by, or consistent with, the natural Reason or Fitness of Things, as they respect our own Happiness, or that of others. For this Purpose, there is in Man the Faculties or Powers of *Understanding* and *Reason*; by the First of these, we know *what ought* to be done; and by the Second, how, and in what Manner; both these together, produce in Man what we call *Conscience*, or the *innate Knowledge*, or *Consciousness of Right and Wrong*; which therefore, must be looked upon as the governing Principle of human Actions.

The next Thing we observe in Man, is a *Power of acting* consistent with, or contrary to, the Dictates

tates of this Law of natural Rectitude; and that this Power is *absolutely free*, and uncontrouled by any Thing usually called *Fate* or *Necessity*, according to the *Will*, or Determination of the Person; and this is the whole Foundation of what is called *moral Agency*.

A Willingness, and Disposition in a Man to act according to the Reason and Fitness of Things, is called, a *virtuous Habit*, or in the Abstract, *VIRTUE*; and every contrary Habit is called a *VICE*. The natural Obligations we are under of performing what the Laws of God or Nature require, make the Classes of *religious and moral Duties*. A proper Discharge of the former denominates a Man *pious*; and of the latter, *moral*.

The *Duties of Piety and Morality*, so far as they are considered as Natural, do all originally arise from the *Law of Reason*, and *Dictates of Conscience*. From what we know and can discover by the Light of Reason, relating to the Existence, and Perfections of God, our Consciences naturally dictate the Duties of *Reverence and Adoration*, of *Love, Fear, Obedience, Hope, Affiance, &c.*

And with respect to each other, as Fellow-Creatures, and designed for rational Society or Communion, we have naturally the *Ideas of Right and Wrong*, arising from such Relation, which as they are distinguished into various Classes relating to the *Person, Property, Relation, Degrees*, and many other Circumstances of Men, lay the Foundation of numerous *moral Virtues, or Duties*; the strict Observance of which, and nothing less, can procure and preserve the *Common-Weal, or Happiness of the Community*.

Virtue is a general Term, and divides into six great Parts, viz. *Prudence, Sincerity, Fortitude, Temperance, Justice, and Charity*. These are called,
Cardinal

Cardinal Virtues, being as it were the *Hinges* on which the whole System of Morality turns.

PRUDENCE consists in a Habit of Mind, that disposes a Man always to discern, judge, and act according to the *Reason* and *Fitness* of Things, with regard to a safe, easy, and happy Conduct of Life. The opposite *Vice* to this is *Imprudence*, or what is commonly called *Folly*.

SINCERITY is that Virtue, which disposes us to act according to the Dictates of our Minds and Consciences; to do the Thing that is right, and speak the plain Truth, without the least Regard to any Advantage of *Profit*, *Honour*, or *Fame*. The opposite Vice is *Hypocrisy*.

FORTITUDE is that Disposition of Mind, by which we form a Resolution to engage in, or undertake any good or necessary Affair, and to persevere in, and prosecute the same, without being deterred by any Danger or Difficulty that may attend it. This Virtue supposes *Magnanimity* or Greatness of Mind, *Equanimity*, and *Patience*. The contrary Vices are *Pusillanimity*, and *Cowardice*.

TEMPERANCE is that Virtue which sets proper Bounds to all our natural Appetites, and thereby prevents all Excesses in the natural Use of Things. What Nature requires, Temperance will admit of, but nothing more. This Virtue includes many lesser, as *Modesty*, *Sobriety*, *Chastity*, &c. The opposite Vices, are *Ambition*, *Pride*, *Gluttony*, *Drunkenness*, *Adultery*, *Fornication*, *Polygamy*, *Incest*, &c.

JUSTICE is that moral Virtue, by which we render to every one *his Due*, as far as *Right* and *Equity* require. This is of two Sorts, *viz.* *distributive*, and *commutative*; the first is concerned in distributing Rewards and Punishments according to the Merit or Demerit of Persons; and is therefore said to be *remunerative*, or *vindicative*. *Commutative Justice*

Justice is that, by which we may give or exchange an *Equivalent* for every Thing received in Trade or Commerce. In the Practice of this Virtue, we have Regard to *Veracity*, *Fidelity*, and *Equity*. The contrary Vices, are *Injustice* and *Iniquity*.

CHARITY is the last mentioned *Cardinal Virtue*, but indeed, the first in Importance, as it consists in that benign and good Disposition towards our Neighbour, by which we are inclined to do him all the Good in our Power, and to make his Life as happy as possible. This Virtue, therefore, is stiled *Philanthropy*, and to express it more fully, *Humanity*. It includes all the Offices of *Benevolence*, *Affability*, *Comity*, *Mercy*, *Beneficence*, *Liberality*, *Manfuetude*, *Clemency*, and *universal Friendship*. The contrary Vices, are, *Ingratitude*, *Envy*, *Malice*, *Enmity*, *Malevolence*, *Cruelty*, *Barbarity*, and *Covetousness*; which are the Roots of all Evil; as on the contrary, *Charity* is the Spring and Fountain of all Goodness. A *charitable Man* is a Man of Honour, and of every other *Virtue*; as he loves all Men, so is he beloved and esteemed by all.

P R A X I S III.

Of PAGANISM; or the HEATHEN DIVINITIES

THE *Pagan* or *Heathen World*, having had no Divine Revelation in the earliest Ages, and as they could not but be convinced of the *Existence* of a *Deity*, from the obvious Marks of *infinite Wisdom* and *Power* in the *Frame* of the *World*, and the *Structure* of all Kinds of Bodies therein; so by the Dictates of *common Reason*, they are led to consider, that

that he must be the Object of their *Worship*, and *Adoration*; but in what Manner this was to be instituted, they were utterly ignorant, and left to their own Inventions.

In a long Course of Time, by the *Weakness of human Reason*, in the Generality of People, and the *selfish and sinister Views* of some, who were to be their Guides in their religious Affairs, there obtain'd among Mankind a great Variety of Opinions, as well in Relation to the *Object of their Worship*, as the *Manner* in which it was to be perform'd. A *Plurality of Gods*, or *Polytheism*, was soon introduced; and a great Variety of Representations of them by *Images or Idols*, which constituted numerous Species of *Idolatry*.

They were so vain in their Imaginations, as to allow of *Sexes* in their Divinities, and accordingly had various Classes of *Gods and Goddesses*, which they blindly worshipped under the Notions and Forms of *Angels, Spirits, and Dæmons*; the *Sun, Moon, and Planets*; of *Men, Beasts, Birds, Fishes, &c.* nay, even Things *inanimate*; and what is most absurd, the very *Modes and Accidents of Things*, as *Life, Health, Virtues, Passions, &c.* They also paid divine Honours to *Kings, Heroes, &c.* made them a subordinate Class, or *Demi-gods*.

The Principal Classes of the Heathen Deities are as follow. 1. The *celestial Gods and Goddesses*. 2. The *terrestrial Ones*. 3. The *marine and river Gods*. 4. The *infernal Deities*. 5. *Miscellaneous Ones*. 6. *Adscriptitious, or Demi-gods*. 7. *Modal Deities*, of which in Order.

JUPITER was the *Sovereign* of all the *Gods*; he was Son of *Saturn* and *Ops*, was educated on Mount *Ida* in *Crete*. In the *Pantheon*, he sits on a *Throne* of *Ivory and Gold*; with *Thunder-Bolts* in his
Right-

Right-Hand, and a *Scepter of Cypress* in his Left, with an *Eagle* on the Top, all which denote him Supreme Lord of *Heaven, Earth, and Air*.

APOLLO, the second in Rank of the *celestial Deities*, was the Son of *Jupiter* and *Latona*; born in the Island of *Delos*; and was the God of *Musick, Poetry, Medicine, and the Chace*.

MARS was the Son of *Jupiter* and *Juno*; he was the God of *Armies and War*, as his Sister *Bellona* was the Goddess thereof.

MERCURY was the Son of *Jupiter* and *Maia*; he was the God of *Eloquence and Merchandize*; also the *Messenger and Interpreter* of the Gods; he had *Wings* on his Feet, and a *Caduceus* in his Hand, as Tokens of *Peace and Amity*.

BACCHUS, the Son of *Jupiter* and *Semele*, was the God of *Feasts and Revels*, of *Wine, Jollity*, and all Kind of *Lewdness*; was crown'd with *Ivy* and *Vine-Leaves*; and always represented *naked*.

The *celestial Goddesses* were; 1. JUNO, Empress of *Heaven*, and Wife of *Jupiter*. 2. MINERVA, or *Pallas*, the Goddess of *Wisdom* and the *Sciences*. 3. VENUS, the Goddess of *Love and Beauty*. 4. LATONA. 5. AURORA, Mother of the *Stars*, and Goddess of the *Morning*.

The *terrestrial Gods* were; 1. SATURN, Sovereign of the *Earth*. 2. JANUS, who presided over all *Enterprizes*, and was represented with *two Faces*. 3. VULCAN, the God of *Metals*, and all *Metal-lurgic Affairs*. 4. ÆOLUS was the God of the *Winds, Tempests, and Hurricanes*. 5. MOMUS, he was rather a *Jester, Mockers, or Mimick*, of the Gods, than a God himself.

The *terrestrial Goddesses* are, 1. VESTA, the Wife of *Cælum*, and Goddess of *Nature*; in her Temple was a *perpetual Fire*, attended by *Virgins*. 2. CYBELE, the Goddess of the *Earth*.

3 CERES

3. CERES the Daughter of Saturn and Ops; the Goddess of Corn and Tillage. 4. The MUSES, which were nine Virgins, viz. Calliope, Clio, Erato, Thalia, Melpomene, Terpsichore, Euterpe, Polyhymnia, and Urania. These were the Mistresses of Sciences. 5. Themis, the Goddess of Right. 6. A-strea, of Justice; and, 7. Nemesis, who rewarded Virtue and punished Vice.

The Sylvestrian and Rural Gods were the Satyrs and Fauns; Priapus, an obscene Deity; and Aristæus and Terminus, who was nothing but a Bound-Stone. The Goddesses of this Class were DIANA or Hecate, who presided over the Chace. PALES, over the Shepherds, and Pastures. FLORA, over Gardens and Flowers. POMONA, over Orchards and Fruits. Besides, a Variety of Nymphs, as the Dryades, who presided over Woods; the Orcades, over Mountains; Napææ, over Vales; Limoniodes, over Meadows, &c.

The Marine Deities were; 1. NEPTUNE, the Son of Saturn and Ops; to him belonged the Sovereignty of the Seas. PROTEUS, his Son, who, 'tis said, could turn himself into all Shapes. 3. TRITON, another of Neptune's Sons. 4. OCEANUS, God of the Ocean, and Father of the Rivers and Springs. Besides these, were reckoned, Nereus, Palæmon, Glaucus, the Sirens, Scylla and Charybdis; and the Sea-Nymphs, Nereides, Naiades, Limnades, &c.

The Infernal Deities were PLUTO, and his Wife PROSERPINA, King and Queen of Hell. The Judges Minos, Æacus, and Rhadamanthus; the Fates, Clotho, Lachesis, and Atropos. The Furies (Eumenides or Diræ) Aleto, Tisiphone and Megæra.

Moreover, in the infernal Regions, you meet with old Erebus and his Wife Nox, who preside
over

over *Darkness* and the *Night*. Also *Mors*, over *Death*; and *Somnus*, over *Sleep*; who by his *Servant Morpheus*, sends *Dreams* to us above while sleeping.

In *HADES* (the heathen Hell) are the following *Monsters*, viz. 1. The *Centaur*s, half *Human*, half *Horse*. 2. *Geryon*, with three *Bodies*. 3. The *Harpies*, with *Virgins Faces*, *Bodies of Birds*, and their *Hands* armed with *Claws*. 4. The *Gorgons*, *Medusa*, *Stheno*, and *Euryale*, whose *Heads* are covered with *Snakes* instead of *Hair*. 5. The *Lamiae*, who had but one *Eye* and one *Tooth* among them all. 6. The *Chimera*, with the *Head and Breast* of a *Lion*, the *Belly* of a *Goat*, and *Tail* of a *Dragon*; he vomits *Fire*. 7. *Sphynx*, *Head* of a *Virgin*, *Wings* of a *Bird*, *Body* and *Feet* of a *Dog*. To these may be added, 8. *Cerberus*, the *Porter of Hell*, a three-headed *Dog*, whose *Body* is covered with *Snakes* instead of *Hair*.

The *Passage* to *Tartarus* or *Hades* was through a wide, dark *Cave*, over a steep, rocky *Descent*, till you come to a gloomy *Grove*, and the poisonous *Lake Avernus*, where the *Souls* are ferry'd over by old *Charon*, and then they are to pass over four *Rivers*, viz. 1. *Acheron*, whose *Waters* are extreme bitter. 2. *Styx*, by which the *Gods* were wont to swear. 3. *Cocytus*, flowing out of *Styx*, with an horrible groaning *Noise*. 4. *Phlegethon*, swelling with *Waves of Fire*. Having passed these *Rivers*, they are conducted to the *Palace of Pluto*, to receive their *Doom*.

In these *Tartarian Regions* they also placed their *Paradise*, which they call'd *Elysium*, consisting of pleasant *Plains*, verdant *Fields*, shady *Groves*, purling *Streams*, and a most serene and temperate *Air*. After the happy *Souls* had long enjoy'd the *Elysian Fields*, they drank of the *River Lethe*, which made them

them forget all those Pleasures ; and then returned to the World again, and possessed *new Bodies*.

There was a Class of *Deities* of a *subordinate* and *miscellaneous Nature* ; as, 1. *Penates*, a Sort of *Teraphim*, who presided over *Provinces*, *Cities*, *Houses*, &c. 2. *Lares*, a Sort of *Domestic Deities*, who presided over *Families*, *Highways*, &c. 3. *Genii*, or *Dæmons*, who govern'd the Births and Lives of People, as *Guardian Angels*. 4. *Libitina*, the Chief of the *Funeral Deities*, with many others.

The DEMI-GODS were made of their *Heroes*, as *Hercules*, *Theseus*, *Perseus*, *Æsculapius*, *Prometheus*, *Atlas*, *Orpheus*, *Amphion*, *Achilles*, *Ulysses*, *Orion*, *Castor*, *Pollux*, *Jason*, and a great Number of others.

The *modal Deities* were worshipped under the several Characters of the Virtues, Passions, Vices, &c. which they were supposed to preside over and inspire, as *Faith*, *Hope*, *Justice*, *Piety*, *Chastity*, *Peace*, *Money*, *Mirth*, *Envy*, *Fame*, *Fortune*, *Silence*, &c.

The PANTHEON was the *grand Temple*, which contain'd the Images and Shrines of all the Deities. The *Festivals* of the Gods were call'd after their own Names ; *Bacchanalia*, the Feasts of *Bacchus* ; *Floralia* of *Flora*, &c. Their Priests were called *Flamens*. The Food of the Gods was *Ambrosia*, and their Drink *Nectar*.

P R A X I S IV.

·On MYTHOLOGY.

MYTHOLOGY consists in a *moral theological, and physical Interpretation* of the *fabulous Histories* of the *Heathen Deities*, *Demi-gods*, *Heroes*, *Monsters*, &c.

The *Theogony* of *Hesiod* and the *Metamorphoses* of *Ovid* contain the principal Matters of this Kind. In the former, we are told, that *Chaos* was the most ancient of the Gods; that soon after appeared *Tellus*, *Tartarus*, and *Amor*, by which he meant the *Earth*, the *Abyss*, or Parts under the *Earth*, and the *Beauty* and *Harmony* of Things.

Then we are told, *Chaos* brought forth *Erebus* and *Nox*, that is, *Gloominess* and *Night*. Also that from *Nox*, sprang *Æther* and *Hemera*, i. e. *Air* and *Day*; and that they were produced when *Amor* and *Erebus* were mix'd together, that is, when Order arose from Disorder, and *Light* was separated from *Darkness*, all which plainly alludes to the *Mosaic Account* of the Creation.

Again, it is said, that *Tellus* begat *Cælum*, or the Firmament beset with Stars, and the Seat of the Gods; we are then told, the Birth of *Oceanus*, or the *Ocean*; of high Mountains and Caves, of the *Nymphs* and *Goddesses*. Also of *Pelagus* and *Pontus*, by which he means the *Seas*; all which is only a poetical Disguise of the *Mosaic Cosmogony*, or Origin of the World.

Hesiod then relates the Birth of SATURN, the most ancient of their Gods; by whom they represented *Time*; it is said, that *Saturn* devoured his Children, by which they mean, that *Time* destroys all Things. By *Saturn*, they also, in an historical Sense, represented *Noah*; and in his Time, they tell us of the *Golden Age*, by which they meant the more perfect and happy State of Men in the first Ages of the World. After this, they say, the *silver*, *brazen* and *iron Ages* succeeded, that is, the World by Degrees became more and more depraved and wicked.

Again, they represent JUPITER as the King of the Gods, darting Thunder-bolts upon the World below;

low; by which they mean the *Air*, where *Thunder* and *Lightning* are generated.

APOLLO was their politest Deity; and presided over *Medicine*, *Music*, and *Divination*. By him they meant the *Sun*; whose Beams dispel Darkness; he gives Vegetation and medicinal Virtues to Plants; and is the Center of the Planets, and governs all their Motions with the utmost *Harmony* and *Proportion*, (by them) call'd the *Music of the Sphere*.

MERCURY was the Nuncio, or Messenger of the Gods; had *Wings* on his Feet, and a *Caduceus* in his Hand; and usher'd the Souls of Men into Hell, or the *Elysian Fields*; by all which is meant, the great Power and Force of *Eloquence*, which qualifies Men for the highest Posts in Life; and greatly influences our Fate, relative to the present and future Life.

MARS was their *God of War*; is represented by the Planet of that Name, remarkable for its *red Aspect*.

BACCHUS was the God of *Festivals*, and an Emblem of *Drunkenness*, which is too often a Consequence of those jovial Intercourses, (called in the Poets) *Bacchanalia*.

VULCAN was the God of *Fire*; by him was meant *Tubal-Cain*; he was cast down from Heaven, they say, because, Lightning is darted from thence; he was lame; so Fire is supported by Fuel. He was Husband to *Venus*, the Moral of which is easy to understand.

JANUS, with his *two Faces*, was an Emblem of Prudence. *Æolus* was the God of the Winds, because he studied the Nature of them. *Plutus* or *Mammon* was the *God of Riches*, and had his Palace in *Hell*; because Riches, when perverted,

conduce so much to send People thither. *Atlas* is said to bear the World on his Shoulders, because he was skill'd in *Astronomy* and *Geography*. The Story of *Prometheus's* making a Man of Clay, and stealing Fire from Heaven to animate him, with *Pandora*, and her Box full of Evils; is all but a poetical Metamorphosis of *Adam*, and *Eve*, the Fall, &c.

As their Gods were all Symbolical, so were the Goddesses too. Thus *Juno* the Wife of *Jove* represented the *Air*, as *Jove* or *Jupiter* did the Sky. *Minerva* was the Symbol of *Wisdom* and *Chastity*; *Venus*, the Goddess of *Love*, was also the Emblem of *Love* and *Beauty*. *Aurora* represented the *Dawn* of the Morning. *Vesta* represented *Fire*, or *Vital Flame* and Heat of the Body. By *Ceres*, they meant the genial, prolific Principle of *Vegetation*. *Diana* represented the *Moon*.

By the Fables of the *Syrens*, *Circe*, *Carybdis* and *Scylla*, we are to understand *Voluptuousness*, *Lust*, and *Gluttony*; by the *Harpies* and *Gorgons*, all Kinds of wicked Arts practised by lewd and vicious Women; *Tantalus* represents a Miser, starving in the Midst of Plenty.

Deucalion and his Wife *Pyrra*, who are said to People the World after a Deluge, by casting Stones behind them, represent *Noah* and his Family preserved from the Flood in the Ark. The Sacrifice of *Iphigenia* plainly alludes to *Jepttha's* Daughter. The Fable of *Phaeton* is said to have its Rise from the Story of *Elijah*. That of *Nisus* from *Sampson*. And *Midas* is the Emblem of a covetous Man.

P R A X I S V.

On R H E T O R I C.

R H E T O R I C is the Art of *Speaking well*, and ornamently, on any Subject. A Speech made according to the Rules of this Art, is call'd an *Oration*; and the Speaker an *Orator*.

In O R A T O R Y, there are four great Parts, *viz.*
 1. *Invention*, by which we find out such Reasons and Arguments, as are adapted to persuade or gain Belief. 2. *Disposition*, which consists in a proper Disposol or Arrangement of the Arguments, or Subject-Matter before invented. 3. *Elocution*, which consists in a rich *Diction* or *Language*, embellished with *Tropes* and *Figures*. 4. *Pronunciation*, which relates to the Delivery of a Discourse or Oration, in Regard of *Voice* and *Gesture*.

INVENTION. derives Arguments from various Topics; as the *Certainty*, or *Probability* of Things. The *Manners*, *Customs*, and *Habits* of *Times*, *Places*, and *People*; the *Testimonies* of *ancient* and *modern* Authors; *Authority* of *Sacred Writings*; *Received Opinions*, *Proverbs*, *Sentences*, *Laws*, *Contracts*, *Oaths*, &c. all which the *Orator* is prepared to use as Occasion requires. As, 1. The *Pathetic*; where he applies them in such Manner, as tend to excite and move the *Passions* as much as possible. 2. The *Panegyric*; where his *Declamation* is filled with the *Encomium* or Praises of *Persons*, *Places*, and *Things*; or else *dispraises* them, in the Strain of *Invective*. 3. The *Rational* or *Deliberative*; where every *Reason*, *Motive*, or *Argument* is made Use of to *persuade* or *dissuade*. 4. The *Judicial*; here the *Orator* *accuses* or *defends* by all the Arguments that

can be thought of, to afford Matter for such Purposes.

DISPOSITION prescribes the best Method of proceeding with the Arguments in an Oration; this Method consists of the following Parts, *viz.* 1. The *Exordium*, or Beginning of the Discourse, wherein the Orator sets forth the *Aim* and *Scope* of what he has to say, and then prepares his *Audience* for due Attention to the Sequel. 2. The *Narration*, which consists in a Recital of Facts, is adapted to convince the Hearers; which should always be *true*, or at least *probable*, *perspicuous*, and *concise*. 3. The *Proposition*; here the Orator proposes the Sum of the whole Oration, and enumerates the several Heads, on which he proposes to expatiate and declaim. 4. The *Confirmation*; wherein he proves his main *Thesis* or *Position*, by every kind of Reasoning pertinent to the Subject. 5. *Confutation*; for when he has confirm'd his own Doctrine, he naturally then proceeds to confute, and disprove that of his *Adversary*. 6. The *Peroration*, *Conclusion*, or *Epi-logue*; this consists in an *Anacephalæsis*, or Recapitulation of the principal Arguments; and the *Pathopæia* or Way of enforcing them on the Minds of the Auditors, and moving their Affections as much as possible.

ELOCUTION is that Part which relates to the *Language* or *Diction* of an Orator; in which three Things are to be consider'd, *viz.* 1. *Elegance*, that is, *Purity* and *Perspicuity* of Style. 2. *Composition*, which gives Rules for a genuine and beautiful Order and Connection of Syllables, Words, Sentences, and Periods in the Discourse. 3. *Dignity*, by which the Oration is render'd *florid* and *ornamental*, by a judicious Use of *Tropes* and *Figures* of Speech.

A **TROPE** is an elegant and beautiful Turning of a Word from its proper Signification to another. As Charity is *cold*; you read *Virgil*, i. e. his *Writings*; the Clouds drop *Fatness*, &c. The principal Tropes are the following, viz. *Metaphor*, *Metonymy*, *Synecdoche*, *Irony*, *Hyperbole*, *Metalepsis*, *Catachresis*, *Allegory*, *Antiphrasis*, *Litotes*, *Antonomasia*, *Diasymus*, *Sarcasm*, and many others. The **FIGURES** of Speech render it fine and beautiful; some regard the *Meaning* of Words, as if we *ride*, let's ride, i. e. push on; some the *Sound*, as he is not a *Friend*, but a *Fiend*; some the *Order*; as, *Meats* are for the *Belly*, not the *Belly* for *Meats*; some relate to *Sentences*; they change *their Soil*, not *Minds*, who plow the Main. In each of these Respects, the *Rhetorician* can easily furnish himself with a rich Variety of Figures, and figurative Turns and Expressions; for the *Flowers* which grow in the Garden of Rhetoric are almost infinite in Respect of their *Names*, *Number*, and *Species*.

PRONUNCIATION is the last great Part, and regards a graceful and apt Confirmation of the *Voice* and *Gestures*, comporting with the Nature of the Subject. The *Voice* should be clear, articulate, free, natural, unaffected, strong, and harmonious. The *Gestures* of the Body graceful, and manly, expressive of proper Passions according to the Subject. This especially respects the Air of the Countenance, and the Tone of the Voice; a *Monotony* of Voice, and the Sameness of Gesture are such Vices of Oratory, whether that of the *Bar*, *Pulpit*, or *Theatre*, as above all other Things, render it irksome and disagreeable to the Hearers.

P R A X I S VI.

On LOGIC.

LOGIC is the Art of *Reasoning* on any Subject, in order to discover *Truth* or *Error*; or, it is the Art of conducting the *Faculties of the Mind*, which are given us for that Purpose, and these are *Four*, viz. 1. *Perception*, whereby we perceive and contemplate the Species of external Objects offered to the Mind by the Senses. 2. *Judgment*, by which we compare Ideas together, in order to affirm or deny some Property of them. 3. *Reasoning*, *Argumentation*, or *Ratiocination*, whereby we infer one Proposition from two or more that are premised. 4. *Disposition*, which is that Act of the Mind, by which we dispose the several Ideas in such Order and Manner, as to yield the most perfect Knowledge of the Subjects to which they belong; and this, by *Logicians*, is called *Method*.

The Subjects of the *Perceptive Faculty* are all Things that offer themselves to our Senses; the *Ideas* which the Mind forms of them; and the Terms by which we express them; in all which we consider the following Things (by the *School-Men*) usually call'd *Predicables*, or *Predicaments*, viz. 1. The *Genus*, or general *Nature*, as an *Animal*. 2. The *Species*, or particular Sort; as *Man*, *Horse*, &c. 3. *Difference*, or that Quality which makes one Thing of a different Nature from another, as *Roundness* in a *Globe*. 4. *Property*, or Mode peculiar to any Body, as *Talking* in a *Man*, *Barking* in a *Dog*, &c. 5. *Accident*, which is any Thing that may casually happen to a Body, and is not essential to its Nature, as *Tallness* or *Shortness*, *Beauty* or *Deformity*.

formity, &c. *Ideas* are divided into, 1. *Sensible*, or such as we acquire by the Senses, as *Colours*, *Sounds*, *Tastes*, &c. 2. *Mental*, which we gain by Reflection in the Mind, as such as relate to *God*, *Spirits*, *Faculties* of the Mind ; *Passions*, as *Hope*, *Fear*, *Love*, &c.

Again, *Ideas* are distinguish'd into, 1. *Simple*, or indivisible, as those of *Heat*, *Cold*, *Sweet*, *Bitter*, &c. 2. *Complex*, which is made by joining two or more of the Simple ones ; as a *bitter-sweet Apple*, a *deep Blue*, &c. 3. *Compound*, such as contain two different *Ideas* of a different Nature together, as a *Medicine* of different Ingredients, *Harmony* of different Sounds united, &c. 4. *Collective Ideas*, such as consist of a Number of *Ideas* of the same Kind, as an *Army of Men*, a *Flock of Sheep*, &c. There are also various other Distinctions of *Ideas* ; as into *real* and *imaginary*, *clear*, and *confused*, *adequate* and *inadequate*, *true* or *false*, &c.

JUDGMENT the second great Part of Ratiocination, is the Doctrine of *Propositions* ; and directs a just Definition of Words and Terms, in order to form a *Proposition*, which is a Sentence affirming or denying something of the Subject thereof ; as, *Plato was a Philosopher*.

In a Proposition, three Things are consider'd, 1. The Subject, as *Plato*. 2. The Predicate, or that which is affirmed, or deny'd, viz. that he *was a Philosopher*. 3. The Copula, which joins both the former, and consists of *affirmative* or *negative* Particles ; as *am*, or *am not* ; *was* or *was not*, &c.

Propositions are distinguished into, 1. *Universal*, by the Words *all*, *every* ; *no*, *none*, &c. as *all Men must die* ; *none*, or *no one* knows when. 2. *Particular*, by the Words, *some*, *many*, *a few*, &c. As *some Men* are born blind ; *few* are truly wise.

3. *Single*,

3. *Single*, or *individual*; as Sir *Izaak Newton* excelled all in Knowledge. 4. *Affirmative*, as God is a Spirit. 5. *Negative*, as Man is not immortal; none are perfectly innocent, &c. 6. *Compound*; when there are two or more *Subjects* or *Predicates*; as, *Light and Heat enliven and delight both Men and Beasts*. 7. *True*, which represents the true or real State of Things; as, *Birds have Wings*. 8. *False*; as *Angels have Wings*; Brutes are meer Machines. 9. *Dubious*; as the Planets are supposed to be inhabited, &c.

ARGUMENTATION, or REASONING, is the third great Part of Logic; and here the Logician has Recourse to a technical Method of forming the *Argument* or *Syllogism*, by which he proves his *Thesis* or Position. In which Syllogism, there are three Terms. 1. The *Major*, which contains the *Predicate*. 2. The *Minor*, which contains the *Subject*; and, 3. The *Middle Term*, by which the other two are connected to shew their Agreement or Disagreement. Thus, suppose the Question were, *Whether God must be worshipped?* Here *Worship* is the *Major* or *Predicate*; God, the *Subject* or *Minor-Term*, and the *Middle-Term* in order to form the Argument, I make the Idea of a *Creator*, and then from the whole reason thus,

Our Creator ought to be worshipped;
But God is our Creator,
Therefore God ought to be worshipped.

These are the three Propositions of a Syllogism, call'd the *Major*, *Minor*, and *Conclusion*. The form of a Syllogism is greatly varied by the Scholastic Methods of Mood and Figure, with which it would avail us very little to be acquainted; there are also various compound Syllogisms, under different Forms and Names, as the *Epichirema*,
Dilemma,

Dilemma, *Prosyllogism*, and *Sorites*; to which may be added, the following defective Syllogism, viz. an *Enthymem*, *Induction*, *Example*. The Syllogism, when artfully contrived to deceive by false Reasoning, is called, a *Paralogism*, or *Sophism*, and the Person who uses it a *Sophist*, or an *Equivocator*.

DISPOSITION is the last great Part of Logic, and consists in the *Art of Method*, or a dialectical Distribution of Things according to the Order of Nature, or as the Subjects treated of may require. *Method* is twofold, *Synthetic* or *Analytic*. *Synthesis* or *Composition*, is that which begins with the several Parts, and proceeds to the Knowledge of the whole; as Geometers first treat of *Points*, *Lines*, and *Angles*; then of *Triangles*, *Squares*, *Circles*, &c. then of the more compounded Figures and Properties of *solid Bodies*; and thus compose an entire System of their Art.

Analysis is that Part of *Method* which begins with the Definition and general Account of the Subject; and then considers and treats of the Nature and Qualities of all the Parts separately; and in this Manner are most of the Sciences taught, as *Grammar*, *Logic*, *Rhetoric*, *Musick*, *Arithmetic*, *Algebra*, *Philosophy*, &c.

ONTOLOGY, or METAPHYSICS, has been sometimes represented as a sublimer Part of *Logic*, sometimes it has been made a particular Science of itself; but as the Subject is *Being*, or *Entity* in the Abstract, or separately considered from *Body*, *Form*, or *Quality*, it is too nice a Speculation to be here insisted upon; and indeed as we know so little about *Entity* or *Non-Entity* in General, and nothing at all about the Nature and Existence of *Spirits*, or *Spiritual Being*; it appears to be more of a *Science of Words* than *Things*, and as such, it is left for their Amusement, who delight in high sound-
ing

ing Words, and can be pleased with *Noise about Nothing.*

P R A X I S VII.

On P O E T R Y.

POETRY is the Art or Faculty of *making Verses*; and a Person naturally possessed of a Genius for this Purpose, is called a Poet; one who is not, and yet pretends to it, is call'd a Poetafter, or Versifier.

VERSE is composed of *Metre* and *Rhyme*. Metre is when every Line is confined to a certain Number of Syllables, as *seven, eight, or ten*; and the Words so disposed, that the Accents may fall on such Syllables as yield a Sort of Harmony to the Ear.

RHYME is the Similitude or Likeness of Sound in the last Syllable of the Lines; sometimes in the Syllable next the last; as in humorous and droll Subjects, like that of *Hudibras*.

A *Distich* consists of *two Verses*; and a *Stanza* of three, or more.

An *Ode*, or *Song*, is a certain Number of *Stanzas* more or less, adapted to *Lyric Poetry*, or such as was anciently set to the *Lyre* or *Harp*.

A **P**OEM is a compleat and finish'd Piece of Poetry, whether in *blank Verse*, or *Rhyme*.

The *Metre* in Poetry consists of a certain Number of Feet made up of long and short Syllables; some Feet are of two Syllables; thus a *Spondee*, has two long Ones; a *Pyrrhic*, two *short*; a *Trochee*, one *long*, and one *short*; *Iambic*, one *short* and one *long*.

A Foot

A Foot of three Syllables is a *Moloss*, of three long ; a *Tribrach* of three short ; a *Dactyl*, one long, and two short ; *Anapest*, one short and two long ; with many others not worth our Mention, as we have scarce any Thing more than the *Iambic Foot* in *English Verse*.

If a Verse consist of *six Feet*, it is call'd *Hexameter Verse*, as was all the *Latin* and *Greek* Poetry of the Heroic Kind. But if the Verse consisted only of *five Feet*, it was call'd *Pentameter*, as in most of the lesser Compositions.

The Kinds of Poetry are various, according to the *Subject*, *Design*, *Characters*, &c.

PASTORAL is a Poem, that describes a *Shepherd's Life*, or that of *Rural Nymphs* and *Swains* ; it is also call'd *Bucolics*, from *Cow-Herds* ; and *Georgics*, when *Husbandry* and *Agriculture* are the Subjects.

ELEGY is a *mournful Poem*, or *funeral Song* ; invented to bewail the *Death* of a Friend, the *Coynefs* or *Cruelty* of a *Mistress* ; and to express all other *plaintive*, *mournful*, and *melancholy* Subjects and Themes.

LYRIC-POETRY is discern'd and distinguish'd from all others by its peculiar Sweetness, *Beauty*, and *Elegance of Diction* ; is generally used in the Composition of *Songs* and *Odes* ; and especially in *Psalms* and *Hymns*, to be sung with the Voice, and set to Music.

The PINDARIC ODE (so call'd from its Inventor *Pindar*) is a Sort of Poetry which consists of *loose and free Numbers*, and *unequal Measure* ; and is exercised on all Subjects, *pleasant*, *grave*, *amorous*, *heroic*, *moral*, and *divine*.

SATYR is a *free*, *jocose*, *witty*, and *sharp* Poem, severely inveighing against *Vice*, and all *corrupt Manners* and *Persons* ; in short, the Matter of Satyr is *Turpitude* ; its *Manner* *invective* ; and End *Shame*.

The Subject of Satyr should be *Truth* and *Facts*; otherwise it degenerates into a *Libel* or a *Lampoon*.

COMEDY is a Part of *Dramatic Poetry*; the *Drama*, being any Poetry acted on a Stage, is usually call'd a *Play*. Hence all the *humorous and comical Scenes* of Life become the Subject of *Comedy*; and its End is to expose and deride Vice and Folly, and to recommend Virtue, by *personal Imitation*. A *Comedy* has five Parts, viz. 1. The *Prologue*, or previous Speech, wherein the Occasion, Design, and Argument of the Play is declared. 2. *Protasis*, which proposes the Subject-Matter of the Play, but the End is not yet discovered. 3. *Epitasis*, which is the working up of the *Plot* or *Fable* towards a Discovery. 4. *Catastasis*, in which the Plot is at its greatest Height. 5. *Catastrophe*, in which the Plot is unravall'd or discovered, and all Things terminate in a *happy Manner*. In all Plays there are *five Acts*, and each Act consists of *two Scenes* or more.

TRAGEDY is the most sublime and useful Part of all *Dramatic Poesy*; here the *Calamities* of illustrious Persons are represented and acted over again; we are hereby affected with *Pity*, *Mercy*, and *Terror*; and taught to avoid the *disastrous Occnsions* of those *tragical Events*. In this Sort of Play, the *Fable*, the *Manners*, the *Sentiments*, and the *Didtion*, all demand the Poets utmost Art and Care. And if in any wise the *Theatre*, or *Theatrical Entertainments* are justifiable, it must be here, where we are made as much as possible aware of the *Miseries* of human Life, and have the *noblest Passions* excited in us towards those who *unhappily fall under them*.

The EPIC, or HEROIC POEM, is a poetical Narration in Verse of some illustrious and important Actions of the Hero celebrated in the Poem; as the great Exploits of *Achilles* in the *Iliad* of *Homer*, of *Ulysses*

Ulysses in his *Odysses*; and of *Æneas* in *Virgil's Æneid*.

THE EPIGRAM is an inferior Sort of Poem; it has three Things essential, viz. *Brevity* or *Conciseness*; *Beauty*, or *Elegance of Expression*; and *Point*, or *sharp Turn of Wit* at the End, which is the principal Thing of all.

ACROSTIC is a Sort of low Wit in Verse, where the Skill of the Poet is employ'd to make the initial Letters of the Poem consist of some Persons Name, Title, or Motto; this and the *Anagram* is reckon'd the first among the Species of false Wit by the Spectator.

AN EPITHALAMIUM is a Nuptial Song or Poem, sung on the Wedding-Night; the Subject of which, are the Joys and Praises of the Bride and Bridegroom, the Felicities of Matrimony; *Invocations*, *Wishes* and *Prophecies* relating to their future, numerous, and hopeful Off-spring.

GENETHLIACON is a Birth-Day Ode, or Song, wherein the Pedigree of the Parents, their brave and heroic Actions, are recited, their Virtues celebrated; also the propitious Influences of the Deity, the Heavens, the Guardian Angels, and particularly the Genius that rules the Birth and Fortune of the new-born Child are celebrated; and the Poet concludes with Wishes of Life and good Fortune for the Child, and Hopes, Comfort, and Felicity to the Parents.

EPICEDIUM is a Funeral Song, used to be sung at the Expences of the deceased; consisting of the Praises of the Dead, the Frailty of human Life, the Certainty of Death; and the many afflicting and lugubrious Accidents in Life, that tend to our Dissolution; together with the Consolations arising from the Hopes of a happy Eternity.

PANEGYRIC is a *laudatory Poem* or *Speech*, made before a public Assembly, and receives various *Epithets*, according to its Subject-Matter, and *Design*; as *Eucharistic*, which gives Thanks; *Encomiastic*, when the Subject is *Praise*; and *Parænetic*, when it *exhorts* and *instructs*.

EPITAPH is a Sort of *Epigrammatic Poem*, which at first was used to be pronounced at the *Tomb* of the Body *interred*; but since it has denoted only the *Inscription on the Tomb*, in *Verse*, generally, though sometimes in *Prose*.

As to the *Rondeau*, *Cento*, *Echo*, &c. they are such trifling Pieces of Art, that scarce any Poet but in a merry Vein, or some jocular Occasion, will even use it.

P R A X I S VIII.

On GEOGRAPHY.

GEOGRAPHY is a Science which teaches the Knowledge of the Globe of the Earth we live upon, by giving a just Description of all its Parts, as far as they have been hitherto discover'd. And because, the Superficies of the Earth consists partly of *Land*, and partly of *Water*; it is therefore commonly call'd, the *Terraqueous Globe*. Also, that Part which treats of the *Land*, is more properly call'd *Geography*; as the other which treats of the *Water*, or *Aqueous Surface*, is call'd *Hydrography*.

General Geography gives an Account of the Magnitude or Dimensions of the Earth; of its constituent Parts, consisting of various Kinds of *Earths*, *Minerals*, *Fossils*, *Stones*, and *Strata*, as far as they have been observed. Also the Proportion

tion of *Land* to *Water* ; and the different Kinds and Qualities of the latter.

The *terrene Part* of the Earth's Surface is divided, in Respect of *Quantity* and *Form*, as follows.

I. CONTINENTS, which are large Parts, comprehending many Nations and Kingdoms ; of these there are four, *viz. Europe, Africa, Asia, and America.*

II. ISLANDS, which are lesser Parts of Land entirely surrounded with Water ; as the Isles of *Britain, Madagascar, Borneo, &c.*

III. PENINSULAS ; these are Parts of Land, compass'd with Water on all Sides but one, where it is join'd to the *Main Land* by

IV. An ISTHMUS, which is that *narrow, long Neck* of Land, by which you pass from the *Continent* to the *Peninsula.*

V. PROMONTORIES are high Mountains, *Head-Lands*, or *Capes*, that run far out into the Sea.

VI. MOUNTAINS are the highest Parts of the Earth, rising far above the Level of its Surface into the Air.

The Waters of the Earth, by *Hydrographers*, are distinguished, as follows.

I. Into OCEANS, which are those large Collections of Water that cover the greatest Part of the Earth's Surface ; as the *Atlantic Ocean*, the *Western Ocean*, *Mer del Zur*, &c.

II. SEAS, which are Waters that lie between the *Continents* and *Islands* ; as the *Indian-Sea*, the *Red-Sea*, the *Mediterranean-Sea*, &c.

III. BAYS, or GULPHS, are those Parts of the Sea or Ocean, that run up and spread themselves within the hollow, or concave Parts of the Land ; as the *Bay of Biscay*, the *Gulph of Mexico*, &c.

IV. LAKES, which are those large Collections of Water that lie wholly within the Land, and have
on

no visible Communication with the Sea; as the *Lake of Constance*, &c.

V. RIVERS, which are large inland Currents of Water, tending to the Sea, into which they dis-embogue themselves.

VI. FOUNTAINS or SPRINGS, which are those Waters that issue from the Sides of Hills and Mountains, where they form Pools or Basons, from whence the Waters descending in Rivulets, give Rise to Rivers.

Of these Springs, some are constant or *Perennial*; some *intermitting*, and others *reciprocate* their Tides, or ebb and flow. Some are Saline, others fresh; some abound with *mineral* Parts, as the *Chalybeat* with *Steel*; the *Sulphureous*, with *Sulphur*, &c.

When the convex Part of the Earth is projected upon a Plan, it is call'd a *Map*; and when the Sea, or any Part, is so projected in *Plans*, with its Rhomb Lines, &c. for the Purpose of Navigation, it is call'd a *Chart*; as the *Plain Chart*, *Mercator's Chart*, &c.

The Earth is represented in Miniature, by the *artificial, terrestrial Globe*; on which are delineated the Circle call'd the *Equator*, on which are measured the *Degrees of Longitude*; the *Meridians*, or Circle of *Latitude*. The *Compass* on the *Horizon*, shews the *Bearings*; the *Quadrant of Altitude* measures the Distance of Places; with many other useful Problems.

The Continent of EUROPE contains the following Nations, Kingdoms, or States, *viz.*

1. GREAT-BRITAIN, consisting of *England* and *Scotland*, which, with *Ireland*, make the *British Monarchy*.

2. FRANCE, whose Metropolis is *PARIS*; it is divided into *Picardy*, *Isle of France*, *Champaigne*, *Normandy*, *Bretany*, *Orleannois*, *Lionnois*, *Provence*,
Languedoc,

Languedoc, Guieane, Gascony, Dauphine, Burgundy, Lorrain, and Alsace.

3. SPAIN, whose Capital is MADRID; it contains *Gallicia, Asturia, Biscay, Navarre, Arragon, Catalonia, Valentia, Murcia, Granada, Andalusia, Old Castile, New Castile, Leon, Estremadura*, besides the Island of *Ivica, Majorca, and Minorca.*

4. PORTUGAL, the chief City, LISBON.

5. ITALY, the Capital, ROME; it contains the Dukedoms of *Savoy and Tuscany*, the Principality of *Piedmont*, Republics of *Manserrat, Milan, Parma, Modena, Mantua, Venice, Genoa, Lucca, St. Marino*; the Kingdoms of *Naples*, and the Territories of the Pope. With the Islands of *Sicily, Sardinia, Corsica, Malta*, and many others.

6. SWITZERLAND, the chief City, BERN; it contains the Cantons of *Bern, Friburg, Basil, Lucern, Soloturn, Schaffhausen, Zurick, Appenzel, Zug, Swisse, Glaris, Uri, Underwald, &c.*

7. The NETHERLANDS, containing the seven United Provinces of *Holland, Zeland, Friesland, Groningen, Overysse, Gelderland and Zutphen*, and *Utrecht*: with the *Austrian and French Netherlands.*

8. GERMANY, the Capital of which is VIENNA; it contains the Circles of the Upper and Lower *Saxony, Westphalia, Upper and Lower Rhine, Franconia, Austria, Bavaria, and Swabia.*

9. HUNGARY, whereof the chief City is PRESBURG.

10. BOHEMIA, the chief City PRAGUE.

11. TRANSILVANIA, chief City *Hermanstat.*

12. SCLAVONIA, the chief City, *Pesega.*

13. CROATIA, the chief City, *Carlstat.*

14. POLAND, containing *Great and Little Poland, Royal and Ducal Prussia, Samogitia, Courland, Lithuania, Warsawia, Walachia, Polesia, Red Russia, Podolia, and Volbinia.*

15. RUSSIA

15. RUSSIA or MOSCOVY, its Capital is *Peterfburg*.

16. SWEDEN, the Capital *Stockholm*.

17. DENMARK, the chief City *Copenhagen*.

18. NORWAY, the chief City *Bergen*.

19. TURKEY in Europe, chief City *Constantinople*.

The Continent of ASIA, is divided into *Turkey* in Asia, *Arabia*, *Persia*, *India* within the *Ganges*, *India* beyond the *Ganges*; *China*, *Chinese Tartary*, *Thibet*, and *Mogul Tartary*, *Siberia*, and the Asiatic Islands in the *Levant* and *Archipelago*, and the Oriental Islands of *Japan*, *Formosa*, *Anyan*, the *Philippines*, *Molucco's*, and *Maldivia* Islands.

The Continent of AFRICA, contains the Kingdom of *Egypt*, *Abyssinia* or *Ethiopia*, *Nubia*, *Zanguebar*, *Cassaria*, or the Country of *Hottentots*, *Monomotopa*, *Monomugi*, *Angola*, *Congo*, *Benin*, *Guinea*, *Negroland*, *Zaara*, *Biledulgerid*, *Morocco*, *Algiers*, *Tunis*, *Tripoli*, *Babary*; together with a great Number of Islands, as *Madagascar*, *Zocotara*, *Babelmandel*, *St. Helena*, *Cape Verd Islands*, the *Canaries*, *Madeira* Islands, the *Azores*, *Teneriff*, *Ferro*, &c.

The Continent of AMERICA is divided into North and South. *North America* contains *Old* and *New Mexico*, *Florida*, *Canada*, *Carolina*, *Georgia*, *Virginia*, *Maryland*, *Pensylvania*, the *Jerseys*, *New York*, *New England*, *Nova Scotia*, *New Britain*, &c. And *South America* contains *Terra Firma*, *Amazonia*, *Brasil*, *Paraguay*, *La Plata*, *Pantagonia*, *Chili*, *Peru*. Also a vast Number of Islands in the Bay of *Mexico*, as *Cuba*, *Hispaniola*, *Jamaica*, the *Antilles*, *Bahama*, and *Caribbee* Islands, besides the great Islands of *Calafornia*, and *Newfoundland* in the North, and *Terra del Fuego* in the South.

P R A X I S

P R A X I S IX:

On. CHRONOLOGY.

CHRONOLOGY is the Science which treats of the Nature, Parts, and Measures of Time. Time is the *Duration of Things* ; its Parts are, *Cycles, Years, Months, Weeks, Days, Hours, Minutes, Seconds, &c.* And by these, the larger and lesser Intervals of Time are estimated, and measured.

The most common, or standard Measure of Time, is a YEAR, which is the Space of Time taken up by the Sun, in making one Revolution in the *Ecliptic*, and is therefore call'd the *solar Year*. This Year is distinguish'd into *Tropical* and *Sidereal*, and again, into *Astronomical* and *Civil*.

The *tropical Year*, is the time the Sun takes up in going from any Point of the *Ecliptic*, and returning to the same again.

The *sydereal Year*, is the Time the Sun takes in going from a *fix'd Star*, and returning to the same.

The *civil Year*, is either *Common* or *Bissextile* ; the Common Year consists of 365 Days ; the *Bissextile Year* of 366 Days, by reason of one *intercalary Day* in four Years.

There is also a *lunar Year*, consisting of twelve *Lunations*, or Periods of the Moon about the Earth, which make 354 Days. To this Year, a Month is sometimes added to adjust it to the solar Year ; and then, it is call'd the *Emblominic Year*.

The *Jews* and *Romans* reckon'd their Time by *lunar Years* ; but as this does not agree with the Motion of the Sun, *Julius Cesar* instituted the
solar

solar Year, with the *Intercalion* of a Day, (as before-mentioned) once in four Years; and from thence it was call'd the *Julian Year* or *Account*, and of late the *Old Style*.

But since the *Julian Year* exceeds the true *Solar Year* by eleven Minutes, *Pope Gregory XIII.* observing from thence, that the *Equinoxes* were ten Days too soon, he threw out ten Days to restore the *Equinoxes*, *Solstices*, &c. to their former Places in the Calendar; and this Correction is call'd the *Gregorian Account*, or *New Style*.

MONTHS, are the Parts of a Year. A *civil Month*, is the twelfth Part of a Year. The *astronomical*, or *lunar Month* is either *synodical*, which is the Time between two Conjunctions of the Sun and Moon, and is call'd a *Lunation*; or *Periodical*, which is the Time in which the Moon makes one compleat Revolution in the *Ecliptic*.

A **DAY**, is the Space of Time contained between the Rising and Setting of the Sun; and this is called the artificial Day. But the *natural Day* contains both Day and Night, and was therefore by the *Greeks* call'd *Nychthemeron*.

AN **HOUR**, is the 24th Part of a *natural Day*.

One of these is divided into sixty Parts, call'd *Minutes*; one Minute into sixty *Seconds*; these again into *Thirds*, and so on.

A **CYCLE** is a *Circle* or *Period* of many Years; of which they are two remarkable ones, *viz.* The *Solar* and *Lunar Cycle*.

The **SOLAR CYCLE**, or Cycle of the Sun, is a Period of twenty-eight Years; in this Cycle they denote the Days of the Week, by the seven first Letters of the Alphabet, A, B, C, D, E, F, G. One of which standing against *Sunday*, is call'd the *Dominical Letter*, for that Year of the Cycle. And because the Year begins and ends on the same Day of

the Week, these Dominical Letters will be different every Year, and proceed in a retrograde Order: Also, because every fourth Year is Bissextile, that will disturb the Order of the Letters, and cause that the same Days of the Week and Dominical Letters will not return to the same Days of the Month, till after twenty-eight Years.

The LUNAR CYCLE, or *Cycle of the Moon*, is a Space of nineteen Years; call'd also the *Metonic Cycle*, from its Inventor *Meton*. The Numbers of this Cycle being of great Use, were formerly wrote in Gold; and are there call'd *Golden Numbers* or *Primes*. This Cycle shews the Changes of the Moon, and the Time of *Easter*, and other moveables Feasts, by means of the Numbers call'd the *Epaets*, which are the eleven Days, by which the *Lunar Year* falls short of the Solar Year.

From the Cycles of the *Sun* and *Moon* multiplied one into the other, there arises another Cycle or Period call'd (from its Inventor *Victorius*) the *Victorian Period*, and consists of 532 Years; at the Expiration of the new and full Moon, the Time of *Easter*, and the Dominical Letters all return in the same Order of Time as in the former Cycle, and so on in all succeeding Cycles for ever. *Dionysius*, a Roman Abbot, made some Correction of this Cycle, and from thence it was call'd the *Dionysian Period*, or *Great Paschal Cycle*.

The Romans made Use of a Cycle, call'd the Cycle of *Indiction*, because it shew'd the Times of certain Payments made by the Roman Subjects to the Republic; it consisted of three *Lustrums*, or fifteen Years; it was established by *Constantine*, A. D. 312, in the Room of the *Greek Olympiads*.

By multiplying the Cycles of the *Sun*, *Moon*, and *Indictions* together, there arises another very large Cycle of 7980 Years, call'd the *Julian Period*,

riod, from *Julius Scaliger* the reputed Author of it.

EPOCHA, or ÆRA, is a certain Term or fix'd Point of Time, made famous by some remarkable Incident, from which, as a *Radix*, or *Root*, we begin our Calculations and Computations of Time, thus, the Creation of the World; the Building of *Rome*; the Æra of *Nabonassar*; the *Hegira*, or Flight of *Mahomed*; the Persian *Jesdegird*; the *Birth of Christ*, which is the most famous of all others, and used throughout *Christendom*.

According to what Æra we reckon by, we date the Time of every memorable Transaction; as, *A. M. i. e. Anno Mundi*; the Year of the World; *A. D. i. e. Anno Dimini*, the Year of our Lord, and so of other *Epocha's*.

P R A X I S X.

On ASTRONOMY.

ASTRONOMY is that Science which teaches the Knowledge of the heavenly Bodies, the *Sun*, *Moon*, *Planets*, *Comets*, and *Stars*, respecting their Nature, Magnitudes, Distances, Motions, and Uses.

The *Astronomer* considers the azure Sky, or *Firmament* as nothing more than the apparent Boundary of Sight, which must therefore be of a spherically concave Figure, in which all the Celestial Bodies must appear. Those which are far distant from us, appear only as luminous Points, which we call *Stars*.

Of these STARS, some appear to be *fix'd*, and others *moveable*; these latter are call'd *Planets*, and are of two Sorts, *viz. Primary*, and *Secondary*. The *Primary Planets* are found to revolve about one large *central Body*, which some have supposed

to

to be the *Earth*, as *Ptolemy* of old; and for that Reason, this has been generally call'd the *Ptolemaic System*.

The *Secondaries*, call'd *Moons*, or *Satellites*, are such as revolve about the *Primaries*; thus the *Earth* has one *Moon*; *Jupiter* has *four*; and *Saturn* has *five*; which were first discovered by the *Telescope*, nor are they to be seen without it.

But it has been found, by the Skill and Observations of Astronomers, that the Planets do not revolve about the *Earth*, but about the *Sun*; whence the true System of the World comes to be call'd the SOLAR SYSTEM. This was, in ancient Times, known to, and taught by the School of *Pythagoras*; and from thence it was call'd the *Pythagorean System*. But in Process of Time, it was lost; and of late Years received and taught by *Copernicus*, and from thence call'd the *Copernican System*. Also, because Sir *Isaac Newton*, the first of all Men, demonstrated the Cause and Laws of Planets Motions, it is very properly now call'd, the *Newtonian System*.

This System consists of the *Sun*; the PLANETS, Primary and Secondary; and the *Comets*. The SUN is that prodigious large Body of Fire and Light, which possesses the Central Part; which by its great Power of Attraction, governs the Motions of the Planets and Comets, and animates them with Light and Heat. It is about one hundred Times as large in Diameter as our *Earth*; and therefore, about a Million of Times as large in Bulk; it is found to turn about its Axis once in about twenty five Days.

The first Planet in the System is MERCURY, which at the Distance of 32 Millions of Miles, revolves about the Sun in about 88 Days.

The *second* Planet is VENUS, and what we call the *Evening and Morning Star*; its Distance is about 59 Millions of Miles; and its *Periodical Time* about 225 Days.

The *third* Planet is our EARTH; at the Distance of about 81 Millions of Miles; it performs its Period about the Sun in 365 Days, or one Year.

The *fourth* Planet is MARS; at the Distance of about 123 Millions of Miles; it circulates about the Sun in somewhat less than two Years.

The *fifth* Planet is JUPITER; 424 Millions of Miles from the Sun, and makes its Circuit about it once in a little less than twelve Years.

The *sixth and last* is SATURN, which, at 777 Millions of Miles Distance, describes its enormous Orbit about the Sun in about 29 Years and an half.

The COMETS are such planetary Bodies, as describe very elliptic, or eccentric Orbits about the Sun; coming very near to it on one Part (thence call'd the *Perihelion*) and going very remote from it on the other, called the *Aphelion*.

These are all the constituent Parts of the *Solar System*, which are usually represented and explain'd in the *Orrery*, *Planetarium*, and *Cometarium*; as are also the Nature and Manner of *Solar and Lunar Eclipses*, the *Phases* of the Moon, the *Vicissitude of Seasons*, the *Alterations* and various Lengths of Day, and Night; the *Precession of the Equinoxes*, &c.

As to the FIXED STARS, as they have no sensible Parallax, we know nothing of their Distance, only that it is immensely great; and that therefore, they must be vastly large Bodies, and shine by their own innate Light, and are consequently Suns, and no doubt, design'd each of them like ours, to inform a System of Planets, and to animate them with Light and Heat.

By

By the ARMILLARY SPHERE and CELESTIAL GLOBE, many curious and delightful Problems of Astronomy are solved. Thus the *right and oblique Ascension* of the heavenly Bodies are shewn by the *Equinoctial Circle*; their *Declination* North or South, on the *General Meridian*; their *Longitude* in the *Ecliptic*; and their *Amplitude* on the *Horizon*. Also their *Rising, Southing, and Setting*, every Day, having first found their Places in an *Ephemeris*, and rectified the Globe to the Latitude of the Place.

PLANISPHERES will also answer the same Purposes, as they consist in a Projection of all the Constellations, together with the several Circles of the Sphere *in Plano*; but these are now very much out of Use, as being difficult and little understood.

The ZODIAC is a Part of the Heavens, five Degrees on each Side the *Ecliptic*; and contains the twelve Signs, viz. *Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius and Pisces*.

P R A X I S XI.

On HISTORY.

HISTORY is a *Narration, or Relation of Things, Action, and Events*, just in the Manner they happen'd, or were transacted; and according to the Time or Year of such Period or *Æra*, as the Historian makes Use of. And the Art of writing History is call'd *Historiography*; and the Knowledge of it, as a *Science* to be taught, is call'd *Historiology*.

The earliest History we have is that of the *Creation of the World*; the *Fall of Man*; the *Uni-*

versal *Deluge*, or Flood; the Preservation of the human Race in the Family of *Noah*; and the re-peopling the several Nations, by his three Sons, and their Posterity.

The first *Monarchy* we meet with was the *Assyrian*, which began by *Nimrod*; was continued by his Son *Ninus*, and after him, by his Wife *Semiramis*, the most celebrated *Heroine* of ancient History; and after 1300 Years, it was dissolved on the Death of its last Monarch *Sardanapalus*.

Out of this arose two other *Empires*, viz. the *Babylonian* and *Persian*; the first continued from its first Founder *Belesis* to the Death of its last Monarch *Darius* the *Mede*, the Space of 210 Years.

That of the *Persians* and *Assyrians* continued entire from *Arbaces* to *Sennatherib*; after that, it was united with the *Babylonian Empire* under *Essarhad-don*, and so continued till the Time of *Nabonatus* (or *Belsbazzar*) when it was subdued by *Cyrus*, who placed his Uncle *Darius* (or *Cyaxares*) on the Throne of *Babylon*, where after two Years he died.

Then *CYRUS* himself ascended the Throne; and began the Universal *Persian Empire* or *Monarchy*, over *Asia* and *Africa*; after 205 Years the last King *Codomannus* (who assumed the Royal Title of *Darius*) was defeated by *Alexander*, Son of *Philip* King of *Macedon*; and thus this second Universal Monarchy expired.

ALEXANDER was called the *Great*, both on Account of his Natural Valour, and also the Success of his Arms; for in twelve Years, he subdued all the Nations from the *Adriatic Sea*, to the *River Ganges* in *India*; and thus began and settled the *Grecian Empire*, which was the third *Universal Monarchy*.

After

After *Alexander's* Death, there arose great Confusion and Strife among his Generals, who (as there was no proper Successor left) took upon them the Government of the Empire; and these at last were reduced to Four, viz. *Cassander*, *Lyfimachus*, *Ptolomy*, and *Seleucus*.

Cassander had the Kingdom of *Macedon* and *Greece*. *Lyfimachus* govern'd *Thrace*, and the Parts of *Asia* which lay on the *Hellepont*, and *Bosphorus*. *Ptolomy* reign'd over *Egypt*, *Lybia*, *Arabia*, *Palestine*, and *Cælo-Syria*. And to *Seleucus* fell *Upper-Syria*, and the Rest.

The next Revolution in the Fortune of Kingdoms, gave Rise to the *Roman Empire*, the fourth and last *Universal Monarchy*. The first State of *Rome* was *Regal*, under twelve Kings; the Second was a *Consulate*, under a Series of *Consuls* for the Space of 470 Years. After this, the *Triumvirate* was form'd between *Julius Cæsar*, *Pompey*, and *Crassus*. But *Cæsar* aspiring to *Universal Dominion and Sovereignty*, after a long War with *Pompey*, whom he defeated, gain'd to himself, not only the Empire of the *Romans*, but, in a few Years, that of all the known World besides. And thus it continued under twelve *Cæsars*, to the Year *Anno Domini* 96.

The *Julian Family* being extinct, *Nerva* began a new Race; to whom succeeded thirty-one *Emperors* to *Constantine the Great*, who began to reign *Anno Domini* 306, and removed the Throne of the *Roman Empire* from *Rome* to *Byzantium*, now *Constantinople*.

The Empire there continued entire till the Time of *Theodosius the Great*, who died *Anno Domini* 395, after having divided the Empire between his two Sons *Arcadius* and *Honorius*; the Eastern Parts

he gave to the former, and the Western Part to the latter.

From *Arcadius* there followed a Succession of sixty-four Emperors in the Eastern Empire, of whom *Alexis V.* was the last, who was defeated by Prince *Henry* (Brother to Count *Baldwin*) and put to Flight; the City of *Constantinople* was taken; and this *Eastern Empire*, after having continued 800 Years, was dissolved into other lesser Kingdoms and States, of which three were remarkable, viz. That under the Emperor *Baldwin* at *Constantinople*; that under *Alexis Comnenus* at *Trebisond*, and the third under *Theodorus Lascaris*, who reign'd at *Adrianople*; but all these at Length, submitted to the Power of the *Turks* under Sultan *Mahomet II.*

From *Honorius* (the second Son) there are reckon'd about ten Emperors in the Western Empire; in which Time it was in a declining State, and suffer'd many Depredations from several barbarous Nations, viz. the *Goths*, *Ostrogoths*, *Vandals*, and *Lombards*; the *Picts*, *Huns*, *Alans*, and *Scythians*, who divided it among themselves, and reigned and ravaged together, in different Parts, but especially *Italy*, till at last *Charlemagne* (or *Charles the Great*) reduced them all to his Obedience, and establish'd the *German Empire* over *Germany*, *France*, *Italy*, and Part of *Spain*. The *Persian Empire* rose out of the *Turks*; the *Empire* of the *Moguls* was founded by *Tamerlane* the Great; and the *Chinese Empire* has its Origin unknown.

P R A X I S XII.

On P H Y S I O L O G Y.

PHYSIOLOGY (call'd also *Physics*, and *Natural Phylosophy*) has for its Subject the *Nature, Causes, Properties, Qualities, Operations*, and all other Affections of Bodies, which go under the general Denomination of the *Phænomena* of *Nature*.

The Nature of Bodies consists in several Properties, some of which are *essential*, or such as are necessarily connexed with the very *Essence* of Matter; and others which are *specific* or accidental, and which distinguish one Sort of Bodies from another.

The essential Properties of Matter are as follow, *Extension*, or Bulk; *Solidity*, *Divisibility*, *Mobility*, *Figurability*, *Ubiquity*, and *Durability*; for every Body, or Portion of Matter, is necessarily consider'd as *extended*, *impenetrable*, *divisible*, *moveable*, *figured*, possessing some *Place*, and *durable* in one Shape or other. Some also add the *Vis Inertiæ*, or *Inactivity* of Matter; and also *Gravity*, though not rightly.

The Specific or accidental Properties, or Qualities of Matter, are generally reckoned the following, viz. *Luminosity*, *Colour*, *Sound*, *Density* and *Rarity*, *Transparency* and *Opacity*, *Hardness* and *Softness*, *Rigidity* and *Flexibility*, *Consistence* and *Fluidity*, *Heat* and *Cold*, *Humidity* and *Siccity*, *Elasticity*, *Odours*, *Vapours*, &c. And this Part of the Science which gives an Explication of the Nature and Causes of these several Properties and Qualities of Bodies, and their Operations and Effects arising

from the different Forces, whereby the Corpuscles attract and repel each other, is called *Somatology*.

The next great Part of this Science is called COSMOLOGY, as it considers the *whole World* of large compounded Bodies; and divides into three general Parts, under the Titles of *Uranology*, *Aerology*, and *Geology*.

URANOLOGY is the Science or Knowledge of the Heavens, that is, of all the heavenly Bodies; and their various Affections of *Distance*, *Magnitude*, *Motion*, &c. and therefore is divided into the following five Parts, viz. *Heliography*, which treats of the *Sun*; *Selenography*, which gives a Description of the *Moon*; *Planetography*, which describes the various *Phænomena* of the *Planets*; *Cometography*, which delivers all that is known of the wonderful Nature of *Comets*; and *Astrography*, which treats of the Nature of the *fixed Stars*.

AEROLOGY is a Philosophical Account of the Nature, Properties, and Uses of the *Air* or *Atmosphere*, which encompasses the Earth on every Side. That Part which treats of the Generation and Properties of the Air, is call'd *Aerography*. That which treats of the Motion of Air, or the Winds constant and variable, is call'd *Anemography*; that which treats of the various Meteors, viz. *Clouds*, *Rain*, *Snow*, *Hail*, *Thunder*, *Lightning*, &c. is called *Meteorography*.

GEOLOGY is a Physiological Description of the *Terraqueous Globe*, consisting of *Land* and *Water*; and this divides into two great Parts, *Geography* and *Hydrography*.

Geography is again subdivided into the four following Parts, viz. *Geography*, properly so called; *Minerology*; which treats of Minerals; *Phytology*, which treats of *Vegetables*; and *Zoology*, which treats of Animals.

GEOGRAPHY, in a restricted and special Acceptation, is that Branch of Physics which describes the *Terrestrial Part* of the Surface of the Globe, with all its Parts and Affections, as to Quality, Figure, Soil, Productions, &c.

MINEROLOGY treats of Matters dug up out of the Earth; as, 1. All kinds of *Earths*, viz. Clay, Loam, Marl, Sand, &c. 2. *Ores*, which are Compositions of earthy and metalline Parts. 3. *Fossils*, as Salts, Chalk, Magnets, Coal, Stones, &c. 4. *Minerals*, as Gold, Silver, Copper, Iron, Tin, and Lead. 5. Precious Stones, as Diamond, Beryl, Crystal, Carbuncle, Jacynth, Topaz, Amethyst, Jasper, Ruby, Garnate, Onyx, Sapphire, &c. 6. *Exuviae* consisting of Shells and Parts of *Sea-Animals* found in the Bowels of the Earth, as the *Echini*, *Glossopetræ*, *Cockle* and *Oyster-Shells*, *Turbens*, *Scallops*, *Bones*, &c.

PHYTOLOGY gives a particular Account of all Kinds of *Vegetables*, or *Trees*, and *Plants*, that grow on the Surface of the Earth, or in the Sea, with a proper Distribution into their Kinds, their Uses, Virtues, &c. All which make the Science of *Botany*.

ZOOLOGY treats of the *Nature*, *Kinds*, and *Species* of Animals, under the following Heads, viz. 1. *Anthropography*, which treats of the Structure and Parts of the *Human Body*. 2. *Zoography*, which treats of the Nature and Parts of *Quadrupedes*, or *Brutes*. 3. *Ornithography*, which treats of the Nature and Parts of *Birds*. 4. *Ichthyography*, which gives a Description of *Fishes*. 5. *Entomatography*, which treats of all Kinds of *Insects*. 6. *Herpetography*, which describes all Kinds of *Reptiles*. 7. *Zoophytography*, which treats of the Nature of all Sorts of Creatures, that partake of both *Animal* and *Vegetable Nature*, as *Oysters*, *Lobsters*, *Snails*, *Polypusses*, &c.

HYDROGRAPHY is that Part of *Geology*, which treats of *Waters* of every kind on the Earth; as, of the *Oceans, Seas, Bays, Gulphs, Currents, Rivers, Springs, Lakes, Mineral Waters, &c.* The Nature, Manner, and Cause of their Production: and the Uses they are of to Mankind.

P R A X I S XII.

On PNEUMATICS.

BY PNEUMATICS is meant that Science which delivers every Thing hitherto known or discovered, the Nature and Properties of Air, and the Use and Construction of the several Instruments, which shew and illustrate the same.

The ATMOSPHERE is that large Body of Air, that environs the Earth on every Side to a very great Height. It is produced by a Fermentation in Bodies, by which the Particles on the external Part fly off by a repelling Force, and mix with the ambient Air, and so make a Part of the same; and here we deduce its many wonderful Properties and necessary Uses. For first.

The WEIGHT, or *Ponderosity* of the Air, must be easy to be understood; because the Parts of Matter must be equally affected by Gravity, and therefore be equally heavy, whether they exist in this separate State of Air, or whether they are fixed in Bodies.

The ELASTICITY, or Spring of the Air, is nothing more than the *Centrifugal* or repelling Force between its Particles. And this is the sole Cause of all other elastic or springy Bodies.

The *Transparency*, or diaphanous Property of the Air, is owing to the Tenuity or Smallness of its
Parts,

Parts ; for when the Particles of the most opaque Body (as Quicksilver) become separated by Solution or otherwise, they are always invisible, and constitute a *transparent Medium*.

By the *Gravity of the Air* the Vapours rise, the Clouds are suspended, and the various Meteors are there formed ; whether *Aqueous*, as *Rain, Snow, Hail, Mists, &c.* or *Fiery*, as *Lightning, the Aurora Borealis*, and other *Coruscations* in the Heavens.

By the *Elasticity* of the Air, the *Sounds* are conveyed from the tremulous Body to the Ear ; for Sounds consist in the pulsive Motion of Air, acting on the Tympanum or Drum of the Ear, and the *auditory Nerve* within, by that Means exciting the Ideas of Sound.

The *Gravity and Elasticity* of the Air together render it the necessary Means of *Respiration* in Animals by rushing into, and expanding their Lungs, and thereby communicating a vivifying Spirit to the Blood, as it passes through them in its Circulation.

The *Diaphaneity* of the Air is necessary to a clear, perfect, and distinct View of Objects placed in it.

In short, without Air, all would be *dark* about us at Noon-Day ; no Fire, Candle, or Coal would burn ; and *Plants* as well as *Animals*, would languish, and die away.

The *Instruments* by which we demonstrate the several Properties of the Air are many, the Principal of which is the AIR PUMP, by which the Air is exhausted, or drawn out of the *Recipient* or *Glass-Receiver*, placed on the Top of the Frame ; by this Means, they approach very near to a *Vacuum*, and thereby render the Weight and Spring of the Air very sensible.

The

The BAROMETER is that very useful Instrument, by which the Weight of the Air is shewn, by suspending a Column of Mercury in a Glass Tube inverted in a Basen of the same Fluid, and Hermetically sealed, or made close upon the Top. It is made in various Forms ; as the *Diagonal Barometer*, the *Wheel Barometer*, the *Marine Barometer*, the *Pendant Barometer*, &c.

The THERMOMETER is an Instrument, by which are shewn the Degrees of *Heat* and *Cold* in the Air by the *Rarefaction* and *Expiration* of *Spirits*, *Oil*, or *Mercury*, contained in a Tube of a small Bore, and sealed on the Top. These are placed by a *graduated Scale*, which are of different Kinds, but that of *Fahrenheit* is of most general Use.

The HYGROMETER or *Hygroscope*, is an Instrument to shew the Degrees of *Moisture* and *Dryness* in the Air, and this may be done by any Sort of Substance, which will expand or lengthen, when moist or wetted, and contract or shrink, when dry ; so they are made in various Forms, according to the Pleasure or Design of the Artift.

The ANEMOMETER, or ANEMOSCOPE, is an Instrument contrived to *measure* the *Strength* or *Force of the Wind* by Vanes, applied like Sails to a Mill, raising or suspending a Weight upon a *conical Axis*, with several other Contrivances to answer such a Purpose.

VENTILATORS are a modern Invention, by which the tainted and infected Air of any close Room is presently thrown out, and fresh wholesome Air admitted in its Room. For this Purpose, they consist of a Box, in which there are two large *Valves* or *Boards*, moving up and down (like a *double Bellows*) in two contiguous Parts ; one of which drives the foul Air out, and the other lets the pure Air in.

The

The CONDENSER is a small Engine, by which the Air may be condensed to a very great Degree, in order to shew many useful Experiments relating to the *Life and Health of Animals and Vegetables*, the Doctrine of Sounds, and various Points of Curiosity. And it is found, that the Spring of condensed Air is superior to any Force, as it will burst any Vessel in which it is contain'd.

P R A X I S XIV.

On OPTICS.

OPTICS is the Science of VISION, whether *Natural*, as performed in the *Eye*; or *Artificial*, as effected by Instruments. *Vision*, or the Sense of Sight, is in all Cases produced by the Action of the Rays of Light upon the fine Expansion of the *Optic Nerve* in the *Eye*, called the *Retina*.

The Rays of Light are distinguished into *parallel*, *converging*, and *diverging* Rays; and they are either *reflected* from *Mirrouers*, or *Speculums*, to the *Eye*; or *refracted* through *Lenses*; and both *Mirrouers* and *Lenses* are of different Figures, viz. *Plane*, *Concave*, *Convex*, *Plano-convex*, *Plano-concave*, *Double Convex*, and *Concaves*, *Meniscus*, &c.

CATOPTRICS is that Part of this Science, which teaches the Nature of *Reflex Vision*, or Vision by Light, reflected from the Surfaces of all Kinds of *Mirrouers*; shewing the Laws of Reflection; the *Formation* of the *Image* in the *Focus* of the *Speculum*; the *Focus*, real and virtual; the *focal Distance* for all Objects; the *Proportion*, *Position*, *Situation*, &c. of the *Image* respectively to the *Object*.

DIOPTRICS is that Part which teaches the same Things of Light, refracted through *Lenses* of every Sort, defining the Proportion of the *Sines* of the *Angles of Incidence and Refraction* in different *Mediums*, as Glass, Water, Diamond, Crystal, &c. and describing the Manner how Vision is perform'd by *Lenses*, in the Construction of all Kinds of Refracting Instruments, both single and compound.

The EYE is the most curious of all these. And the Forepart, or *Cornea*, is quite *transparent*, for the free Admission of Light; it is also of a *Convex Figure*, for conveying the Rays of Light to a Focus on the Retina, which Figure it receives from the *Aqueous Humour* behind it. The next Part is a *Diaphragm*, called the *Uvea*, in which is a Perforation, or Hole, called the *Pupil*, to admit a due Quantity of Light. Immediately behind this is a curious Part, of a *Lenticular Form*, called the *Crystal Humour*, for adjusting the *Focal Distance* in the Eye. The next is a large Quantity of the *Vitrious*, or *Glassy Humour*, to render the Eye large and globous; behind which, on the Tunic, called the *Choroides*, is expanded the Optic Nerve in what is called the *Retina*; which is the immediate Organ of Sight.

The Eye in some People is too convex, and makes them *purblind*, or short-sighted; such an one is called a *Myops*, and is assisted by a *Concave Lens*. When the Eye is too flat, as with Age, in *Presbyta*, or Old People; it is relieved by a *Convex Lens*; and hence the use of Common *Spectacles*, or Reading Glasses.

As the Natural Eye is not fitted to discern Objects at a *very near*, or *very remote Distance*; so this has given Occasion for the Invention of *Microscopes* and *Telescopes*, single and compound.

A MICROSCOPE is an instrument to view very small Objects, which require to be held very near
the

the Eye; it is made either with a single Lens, or Convex Glas, of a very small *focal Distance*, and then it is called a *single Microscope*. Sometimes it is used with a small *Concave Mirrour*, to throw Light on opake Objects, and is then called a *Liber Kun*, from the Inventor's Name. Others are constructed with an Object-Lens, and two Eye-Glasses, which greatly amplify or enlarge the *Field of View*, and then they are called *Compound Microscopes*.

The SOLAR MICROSCOPE is the common Microscope, with a proper *Apparatus*, applied to the Sun-Beams in a darkened Room, for magnifying all Kind of transparent Objects to a prodigious Degree.

The TELESCOPE is made two Ways, either with *Lenses*, and then it is called a *Refracting Telescope*; or with Metalline Mirrors, and then it is called a *Reflecting Telescope*. These Instruments are designed for representing distant Objects more clearly and distinctly to the View. If the Eye-Glas be concave, it is then called a *Prospective Glas*. And a Glas placed at Right Angles before the Object-Glas, makes a *Polemical*, or *Opera-Glas*. Some of these Instruments are adapted to View with both Eyes, and are called *Binocular Telescopes*.

MICROMETERS are Instruments applied to Microscopes and Telescopes, to measure the very small Parts of Objects to a great Exactness.

Camera Obscura's, or *Scioptric Balls and Sockets*, are Instruments, consisting of a Ball moveable in a Frame, applied to the Hole of a Window-Shutter in a darkened Room, which, by Means of a Convex Lens, with a large focal Distance, makes a Picture of all the Objects abroad; also the *Clouds*, *Face of the Sun*, &c.

The

184 ON HYDROSTATICS.

The PRISM is that most useful Glass with three plane Sides, by which the *Sun-Beam*, passing through it, is refracted variously, and separated into all its Original and more simple Parts; each of which excites a particular Idea of Colour; whence we learn the Reason of the *manifold Colours of Natural Bodies*; the *Iris*, or, *Rain-Bow*, *Halos*, *Parhelias*, or Mock-Suns; *Paraselenes*, or Mock-Moons.

Besides the above, there are many other Optical Inventions; as, the Reflecting *polish'd Cylinder*, for the *Anamorphosis*, or shewing a beautiful Image of a Person from a deformed and shapeless Picture drawn about it. The Application of large Mirrours and Lenses, for viewing Prints and other Pieces in Perspective. The *Heliostata* for answering all the Purposes of the *Solar Microscope*, more accurately. With many others.

P R A X I S XV.

ON HYDROSTATICS.

HYDROSTATICS is the Science which teaches the *Nature, Properties, and Laws of Fluids*, in respect of their *Action and Motion*. But that Part which treats of the Motion of Fluids, and of such Machines and Engines as are concerned in Water-works, is called HYDRAULICS.

The Nature of *Fluid Bodies* results from the *Figure* of the Particles of which such Bodies consist; which must be *round or spherical*, that their *Cohesion* may be least possible; and consequently, that they may move with the greatest Freedom possible among themselves; and therefore yield to the least *Force* impressed upon them, which is the *common Definition* of a *Fluid*.

Hence

ON HYDROSTATICS. 185

Hence Fluids act or press, not only in a Direction *perpendicularly downwards* (like solid Bodies) but also *upwards, side-ways*, and in *all Directions* equally, as is proved by Experiments. Hence we deduce the Solution of the *Hydrostatic Paradox*, the *Rationale* of *Sinking* and *Swimming*, and of *Specific Gravity* in general, in all Kinds of Bodies.

The fundamental Experiment of *Hydrostatics* is to shew, that every Body immersed in a Fluid loses so much of its Weight, as is equal to the Weight of an equal Bulk of the Fluid. And from hence it is proved, that there is no such Thing as *absolute Gravity* or *Levity* in Bodies; since the same Body may sink in one Fluid, and swim in another. Hence also, it is proved, there can be no such Thing as an *Universal Plenum* in Nature.

THE HYDROSTATIC BALLANCE is an Instrument, to shew the Difference of Weight of any Body, and an equal Bulk of Fluid, by weighing it in that Fluid; and this is what is called, *finding the specific Gravity* of such a Body.

THE HYDROMETER is an Instrument, consisting of a hollow Globe, and a graduated Stem, with a Weight at the Bottom, to sink it to half the Length of the Stem under the Surface of *Rain-Water*, *Proof-Spirits*, &c. then, by putting it into *other Waters* or *Spirits*, it will shew how much they are *heavier* or *lighter*, *stronger* or *weaker* than the *Standard*.

RESERVOIRS and AQUÆDUCTS depend upon the Gravity and Pressure of Fluids; for the Fluid will always rise to the same perpendicular Height in the *Aquæduct* or *Conduit-Pipe*, as is equal to that in the Reservoir, and never higher.

JET D'EAU's are made upon the same Principle; for if, to the lower Part of a Pipe communicating with a *Reservoir*, there be fixed an *Adjutage*,
or

or curved Pipe, with a small Hole, opening upwards, the Water will spout through that Hole perpendicularly upwards, to the Height nearly of that in the Reservoir, and make a delightful *Fountain*.

The *SYPHON* is another *Hydraulic Instrument*, consisting of a curved or crooked Tube, with one Leg longer than the other; and therefore, when it is filled with Water, or any Fluid, it will run through the longer Leg, and decant off the Liquor from the Vessel in which it is placed.

The *PUMP* is common, and yet the most considerable and useful of *Hydraulic Machines*; by it we are enabled to raise Water by *Suction* to the Height of about *thirty Feet*; and this is done by an *Embolus* or *Piston*, moving up and down in a Barrel, in both which there is a Valve, which admits the Water upwards, but prevents its returning. As the Column of Air is lifted off the Water within-Side the Pipe, by the ascending Motion of the Piston, the Water in the Well below, by the Pressure of the Air on its Surface, is forced to ascend in the Pipe, and into the Barrel, to keep an *Equilibrium*, and not to prevent a *Vacuum*, as is usually supposed. Besides, this, there are *forcing Pumps*, *lifting Pumps*, and other *Water-Engines*, working by *Cranes*, for raising Water to any Height required.

ARCHIMEDES'S SCREW, is another Contrivance for raising Water, by Means of a large Pipe coiled round a Cylinder, which, when put into Motion, screws the Water from the lower to the upper Parts, where it is discharged into a *Cistern* or *Reservoir*.

NEWSHAM'S WATER-ENGINE is contrived to produce a *continual Stream* for extinguishing Fire; it consists of *two Pumps* and an *Air-Vessel* between them. The Pumps from either Side force Water in at the lower Part of the Air-Vessel, which
by

by Degrees, greatly condenses the Air in the Vessel, which is confined by a Stop-Cock on the Top, from whence a Pipe goes down through the Water to the Bottom; through which, when the Air is sufficiently condensed, by turning the Stop-Cock, a constant Stream is thrown upon the Fire at a great Distance.

The FIRE ENGINE for raising Water from great Depths, is a noble Work of Art; it is work'd by Means of Water rarefied by Fire into a very strong elastic Steam, which being let into a large Cylinder or Barrel, gives Liberty for a large Piston to move upwards at an End of a Lever, by the prepondering Weight of the Piston of a Pump at the other End; then the Steam being condensed in the Barrel, by a Jet of cold Water, a *Vacuum* is made, and the broad Piston now descends by the Pressure of the Air upon it, and by that Means the Piston of the Pump on the other Side rises, and brings up the Water; and thus it works continually.

P R A X I S X V I .

On MECHANICS.

MECHANICS is that Science which teaches the *Nature* and *Laws* of *Motion*; the *Action* and *Force* of *moving Bodies*; and the *Construction* and *Effects* of all those *Machines* and *Engines* which go by the Name of *Mechanical Powers*.

MOTION and REST in Bodies may be distinguished into three Sorts. 1. That which is *true* or *real*. 2. That which is only *sensible* or *apparent*; and, 3. *Relative Motion* and *Rest*. These Ideas are
all

all occasioned by the *Motion or Rest of the Image of Objects* on the *Retina* or *Optic Nerve* in the *Eye*.

Motion is said to be *equal* or *uniform*, when a Body moves always with the *same Velocity* or *Celerity*: but *accelerated* or *retarded Motion*, is that whose *Velocity* is always *increasing*, like that of a falling Stone; or *decreasing*, like that of a Bullet shot upwards.

The *Momentum* or *Quantity of Motion*, is proportional to the *Quantity of Matter* in Bodies, and the *Velocity of Motion*; and therefore, as the *Product*, or *Rectangle* under both.

The LAWS of MOTION are many; of which there are three principal Ones, called also the *Laws of Nature*, from their universal Extent. They shew, that Bodies naturally tend to persevere in a State of *Rest* or *moving* uniformly in a right Line.—That *Action* and *Re-action* are equal between Bodies impressing on each other.—That the Sum of the *Motions* towards the same Parts, remains the same after *Collision* as before, &c.

The Causes of Motion in all Bodies are two, viz. *Volition*, or the Act of the Will in *animated Bodies*, from whence *muscular Motion* ensues; and a *centripetal* or *centrifugal Force* in inanimate Bodies; this among the small constituent Particles of Matter (called *Corpuscles*) is usually called the *Attraction of Cohesion*, or *Repulsion*, according as the Particles attract, or repel each other. But in all large Masses of Matter, as the Sun and Planets, it is called *Gravitation*, or the *Power of Gravity*.

By this Power, all Bodies fall or descend towards the Earth; and hence Pendulums receive their Motion, and vibrate backwards and forwards in equal Times; but because they lengthen with Heat, and contract with Cold, the Times of their Vibrations will not be equal, as is shewn by the Instrument,
called

called a *Pyrometer*; and therefore, they cannot produce *equable Motion* in Clock-work, which is their chief Use.

The *Center of Oscillation*, in any Body moving about an *Axis*, is also the *Center of Percussion*, or that Point, in which the Force of the whole Body is wholly exerted, or where the Stroke is greatest of all.

The *Center of Gravity* in Bodies is that Point, which, if it be supported, the whole Body is supported, or kept from falling. And there is a *common Center of Gravity* between all the moving Bodies in any System, about which their Motions are all performed.

On the preceding Principles those Machines depend, which we call *Mechanical Powers*; and any Instrument is so called, that will enable us to lift, or move a heavier Body than we can by our bare muscular Strength. They are in all but Six, three of which encrease our Force, by encreasing the Velocity above that of the Weight; and the other three, by diminishing the absolute Gravity of Bodies.

The LEVER is the first and most simple *Mechanical Power*; it consists of an inflexible Rod, with two unequal *Brachia*, or Arms; supported by a *Fulcrum*, or Prop, which is the *Center of Motion*; the Velocity or Force, is hereby encreased in the Ratio of the longer *Brachium* to the shorter.

The PULLEY is the second; it is not singly a *Mechanical Power*; but two or more will always prove so; for the Velocity or Force will be here augmented in Proportion of Unity to the Number of Ropes belonging to the lower Set of Pulleys.

The AXIS IN PERITROCHIA, or the Wheel and Axle, is a Machine by which the Power on the Periphery of a large Wheel acts against the Weight on the Axle, and therefore the Force is encreased

creased in *Proportion of the Diameter of the Wheel, to that of the Axis*. Of this Kind is the *Winch*, the *Windlafs*, the *Capstan*, &c.

The *INCLINED PLANE* is a Mechanical Power, by diminishing the Weight of Bodies laid upon it; for as such a Weight presses the Plane by a Part of its Gravity, that Part is all destroyed by the *Reaction* of the Plane; and the *residual Weight* is to the *whole Gravity* as the *Height* of the Plane to its Length.

The *WEDGE* being only a double *inclined Plane*, must be a Mechanical Power of Course; and encreases the Force in the same Ratio.

The *Helix*, or *SCREW*, is the *inclined Plane* coiled about a Cylinder; but in order to consider this as a Mechanical Power, we must conceive the Power or Hand applied immediately to the Thread of the Screw, which is never done; and there the *Screw* is not to be reckoned a simple Mechanical Power.

In all *Machinery* there is an Allowance to be made for *Friction*, which is very much abated by *Friction-wheels*, or very small Wheels on which the Axles of the large Ones move with great Facility. But as this can't be absolutely taken away, 'tis plain, there can be no such Thing as a *Perpetual Motion* by Art.

P R A X I S XVII.

On ARITHMETIC.

ARITHMETIC is the Art of Computation by *Numbers* or *Figures*, and by *Species* or *Symbols*; and therefore, is divided into two general Parts, viz. *Numerical*, and *Specious*.

Numerical

Numerical Arithmetic teaches the Art of computing by Figures, call'd Digits, of which there are Nine, viz. 1, 2, 3, 4, 5, 6, 7, 8, 9, and the Cypher 0. By these are Quantities subject to Number, computed and estimated either *Whole*, or in *Parts*.

That Part which treats of *whole Numbers*, is called *Vulgar Arithmetic*; and such whole Numbers are called *Integers*. The first Part of common Arithmetic is called *Numeration*, which teaches how to enumerate, estimate, or express the Value of any Sum or Number of Quantities in Figures. The several Operations on this Part of Arithmetic, are performed by the four fundamental Rules of *Addition*, *Subtraction*, *Multiplication* and *Division*.

ADDITION is that Rule, by which we are enabled to *add* together, or *cast up* any Number of particular Sums into one Sum or *Total*, whether they are of one Denomination or several, as Pounds, Shillings, Pence; Miles, Furlongs, Poles; Pounds, Ounces, Penny-weights, &c. In short, every Thing relating to *Money*, *Weight* and *Measure*.

SUBTRACTION is that Rule, by which we take from a large Number or Sum, one that is less, which is called the *Subtrahend*, in order to find the Difference or *Remainder*.

MULTIPLICATION is the Rule by which any Number (called the *Multiplicand*) is added to itself, or repeated so many Times as there are Units in the *Multiplier*; and by this Means, the *Product* of the whole is obtained. This Operation is in Effect only an artificial or concise Way of *Addition*.

DIVISION is the Reverse of *Multiplication*, for by this Rule, we find how often any proposed Number called a *Divisor*, is contained in another called

called the *Dividend*, and the Number expressing, that is called the *Quotient*.

By these Rules various other Operations in Arithmetic are performed, viz. *Reduction, Rule of Three, Practice, Alligation, Fellowship, Extraction of Roots; Interest*, and what relates to *Annuities, Pensions, &c.* with every Thing concerning Commerce, and Merchants Accounts.

That Part of Arithmetic which manages the Parts of Numbers is called FRACTIONS; of which there are several Sorts, viz. 1. *Vulgar Fractions*, consisting of two Numbers, divided by a Line, as $\frac{1}{2}$, $\frac{7}{13}$, &c. of which that above the Line, is called the *Numerator*, and the other below the *Denominator*. 2. *Decimal Fractions*, or rather *Decimals*, because in this Way, the Denominator is always 10, or some *Multiple* of it; as $\frac{7}{10}$, $\frac{17}{100}$, $\frac{357}{1000}$; so that the Denominator is left out, and those Numbers more simply thus, 0, 1; 0,07; 0,357. 3. *Duododecimals*, or that in which the Integer is supposed to be divided into twelve Parts; as a *Foot* into twelve Inches; a Day or Night into twelve Hours, &c. 4. *Sexagesimals*, where the Integer consists of sixty Parts, and each of these Parts of sixty others; as a *Degree*, or *Hour* is divided into sixty *Minutes*; each *Minute* into sixty *Seconds*; these into sixty *Thirds*, &c. Besides these Species of *Numerical Arithmetic*, there is another, which is a Sort of *Artificial Arithmetic*, called LOGARITHMS, which perform the tedious *Multiplication and Division* of Numbers, by an easy *Addition and Subtraction* of two Lines of these *Artificial Numbers*, or *Logarithms*. Also by multiplying or dividing one Line of these Numbers by 2, 3, 4, 5, &c. you at once have the *Square, Cube, Biquadrate, Sur-solid, &c. Powers*, or the *Square Cube, &c. Roots*.

Con-

Consequently these Numbers are of singular Use in all Parts of Arithmetic and Geometry, and are disposed into Tables for that Purpose. The Reason of their Name, and of their very great Use, is, because they properly are the *Ratios* of Numbers, or express their *Proportions to Unity*; and are therefore an Arithmetic of such *Ratios* or *Proportions*.

Specious Arithmetic consists of two Parts, viz. ALGEBRA, and FLUXIONS; of which the former is a very ancient, the latter a modern Invention.

ALGEBRA is a Sort of *Universal Arithmetic*, and has this peculiar Artifice, that it supposes every unknown Quantity to be known, and then proceeds by the various Operations of common Arithmetic, to make such a Comparison, and investigate such Relations between them and the known Quantities, that at last they form into an Equation, by which the unknown Quantities do now become really known. In *Algebraic Processes*, the common Letters of the Alphabet (called *Species* or *Symbols*) are put to represent Quantities, known, and unknown; the known ones are designed by the first Letters *a, b, c,* &c. and the unknown by the last Letters *x, y, z,* &c. And thus by Means of these Species and Figures together, a Solution is obtained in a general Way to many curious Problems by *simple, quadratic, and cubic Equations, infinite Series, &c.*

FLUXIONS is another Part of *specious Arithmetic*, or rather, it is an *Arithmetical Geometry*; for Quantity is much more the Subject of this Science than Number. Since by Fluxions is only meant that particular Rate of Velocity by which any Line, Superficies, or Solid, is generated by the Motion of a Point, a Line, or a Superficies; for when the Ratio of the Velocities is known, the Fluents, or flowing Quantities, generated in any given Time, may thence be ascertained. Here Letters are used, as in Algebra, with

this Addition, that if x denotes any Quantity, then a Point placed over it, $\dot{x}$ denotes the *Fluxion* of that Quantity.

All the abstruse Problems in the *higher Geometry*, the *Maxima* and *Minima* of Quantities, *exponential Equations*, universal Theorems, and the deepest Enquiries in Natural Philosophy, have all a Solution from the peculiar Method and Rules of this noble Science, which is the highest Improvement of the *Analytic* and *Synthetic Art*: And is the greatest Invention of the greatest of Men, Sir *Isaac Newton*.

P R A X I S XVIII.

ON GEOMETRY.

GEOMETRY is the Science which teaches the *Nature* and *Properties* of Quantity extended, viz. *Lines*, *Angles*, *Superficies*, and *Solids*, and gives Rules for their *Mensuration*.

LINES are either *strait* or *curved*; and as an *Angle* is only the Space between two Lines intersecting each other, it will be *rectilinear*, or right-lined; *Mixtilinear*, consisting of a *Right Line* and *Curve*; or *Curvilinear* between two Curves. If an Angle is less than 90 Degrees, it is *Acute*; if equal to 90°, a *Right Angle*; and if more than 90, an *obtuse* one.

SUPERFICIES, as they are contained under Right Lines or Curves, will be *Rectilinear* or *Curvilinear* also. Of the first Sort are *Triangles*, *Squares*, *Trapeziums*, *Parallelograms*, a *Rhombus*, a *Rhomboides*, a *Pentagon*, *Hexagon*, *Heptagon*, *Octagon*, &c. Of the latter Sort are *Circles*, the *Parabola*, *Ellipsis*, and *Hyperbola*, which are called the *Conic Sections*; though generally speaking, these Names are given to the

the Lines or Curves which bound these Figures, and the Surfaces themselves are called the *Areas* of these Curves. The same may be observed of the *Cycloid*, the *Cissoïd*, the *Conchoid*, the *Logarithmic Curve*, the *Catenaria*, *Spirals* of all Sorts, &c.

SOLIDS are of three Dimensions, *viz.* *Length*, *Breadth*, and *Thickness*; the Principal of these are the *Globe* or *Sphere*; the *Cube*, *Parallelepipedon*, *Prism*, *Cone*, *Pyramid*, *Cylinder*; *Frustums* of Cones and Pyramids; *Conoids*, *Spindles*, *Ungulas*, &c. with the five regular Bodies, the *Tetrahedron*, *Octahedron*, *Hexahedron*, *Icosahedron*, *Dodecahedron*.

The practical Part of Geometry is concerned in Mensuration of every Kind, according to the various Mathematical Sciences in which it is required. Thus

ALTIMETRY is applied to the Measuring all *Heights*, accessible or inaccessible, by the *Quadrant*, &c.

LONGIMETRY measures all Sorts of *Distances*, at one or more *Stations*, by the *Quadrant*, *Circumferentor*, *Theodolite*, &c.

GEODESIA is that Art of *measuring Land*, by the *Plain-Table* and *Chain*, *Theodolite*, &c.

TRIGONOMETRY is another most considerable Branch of Geometry; it supplies us with a ready Method, by Means of a Table of artificial *Sines*, *Tangents*, and *Secants*, of finding the Sides and Angles of all Sorts of Triangles, *plain* and *spherical*, right-angled or oblique. And indeed, this is the Ground and Foundation of most other *Mathematical Arts*.

NAVIGATION is the Art of Sailing, or conducting a Ship over the large Surface of the Ocean; and this is altogether performed by the Solution of the Triangles, the several Parts of which represent the *Difference of Longitude*, the *Difference of Latitude*,

tude, Departure, Course steer'd, Distance run, &c. which are all found in different Ways, or by different *Charts*; as the *Plain Chart, Mercator's Chart, the Globular Chart, Middle Latitude Sailing, Great Circle Sailing, &c.*

FORTIFICATION, or *Military Architecture*, is the Art of *fortifying* any City, Town or Place, against the Attacks, or Siege of an Enemy; by digging, or Foss, or Moat, and throwing up a Rampart or Wall of Earth, of a proper Form for Defence, consisting of *Curtains* and *Bastions*, and various Out-Works in the Foss; as *Crown-Work, Horn-Works, &c.*

BALLISTICS, or the Art of *Gunnery*, is wholly Mathematical; since the Ball describes a *Parabola* in its Flight *in Vacuo*; and the *Impetus* or Force of Powder, the *Elevation* of the Piece, the *Height* or *Altitude* of the Projection, and the *Random, Amplitude*, or horizontal Distance of the Shot, are all of them represented by the Sides and Angels of a plain Triangle.

SCIAGRAPHY teaches all that relates to DIALLING, or the Art of shewing by the *Shadow* of a *Gnomon* or *Style*, the *Hour of the Day* on any Plane whatever; the *Gnomon* is always parallel to the Earth's Axis, and points to the Poles of the World in every *Dial*; a Dial on the Plane of the Horizon, is called an *Horizontal* one. If it be perpendicular thereto, it is called an *Erect Dial*; and if the Plane declines from the South or North, it is said to be an *erect declining Dial*; if the Plane be situated obliquely to the Horizon, by Dial, is called a *reclining* or *inclining* One.

PERSPECTIVE is the Art of delineating Objects, as they appear to the Eye on a diaphanous Plane placed between us and them. It is altogether Mathematical in Theory and Practice. The Point of Sight

Sight is where the Eye is supposed to be in the *Vertical Plane*, to which from every Angle or Point of the Object on the Ground-Plane, Rays, or *Radial Lines* are drawn; which give the Point on the Perspective Planes that limit the Perspective View of the said Object.

PLANIMETRY is the *Geometrical Mensuration* of Surfaces in *Square Measure*; as *Square Miles*, *Yards*, *Feet*, *Inches*, &c.

STEREOMETRY is the *Mensuration* of all Kind of *solid Bodies* in *solid* or *Cubic Measure*, as *Cubic Feet*, *Cubic Inches*, &c. This also includes *Gauging*, or the Art of finding the Contents of any Cask or Vessel, or a Quantity of *Liquids* contained in them in *Liquid Measure*; as *Gallons*, *Pints*, &c. Also *Timber-Measure*, superficial and solid.

But the Solution of Problems relating to the *Maxima* and *Minima* of Quantities; drawing *Tangents* to *Curve Lines*; finding the *Points of Inflection* and *Retrogression* in Curves; the *Radii of Curvature* and *Evolutes of Curves*; the *Rectification* of *Curve Lines*; the *Quadrature* of *Curves*, or finding their *Areas*; finding the *Centers of Gravity*, *Oscillation*, and *Percussion* in Bodies; the *Laws of Attraction* and *Central Forces*; the *Resistance of Mediums*, &c. make the *higher Geometry*; in which the Nature of all Curves and Curve-lined Areas are expressed in *Algebraic* and *Fluxionary Equations*, in the Relations of their *Ordinates* and *Abcissæ*, or their respective *Fluxions*.

P R A X I S XIX.

O n M u s i c.

MUSIC is the Art of *modulating Sounds* for *Melody* and *Harmony*; *Melody* respects *Vocal Music*, such as is used in *Singing*; and is *sacred*, as that composed for Anthems, Psalms, Hymns, &c. or *prophane*, as that which is set for common Odes, Songs, Operas, &c.

HARMONY is such a Composition of Musical Notes or Sounds, as makes an agreeable Consonance to the Ear, in a great Variety of *Airs* or *Tunes*.

The common Cause of Sounds, in general, are the *Tremors* of a *sonorous* Body when struck; these produce successive Pulses of Air, which striking the *Tympanum*, or Drum of the Ear, agitate the internal Air, and by that Means variously affect the *Auditory Nerve*, and so excite the different *Ideas* of *Sound*.

Thus all Kinds of *Strings*, or *Chords*, stretch'd on proper Instruments, as *Lyrichords*, *Spinets*, *Virginals*, *Dulcimers*, *Harps*, *Violins*, &c. are made to emit *Musical Sounds*; and so Air, contained in Pipes or Tubes, when modulated with the Breath, or otherwise, and expressed through proper Apertures, will afford different Notes and Musical Sounds, as in the *Organ*, *Flute*, *Trumpets*, &c.

A String, or Chord, will vary its Note in three Respects, *viz.* of its *Length*, *Diameter*, and *Tension*; for the *shorter* the Chord is, or *less* in Diameter, or the *greater* the *Tension*, the *higher* or more *acute* will the *Note* or *Tone* of that String be; and *lower* or more *grave* the *Tone* in Proportion, as
it

it is tended with a *less Force*, or is *longer*, or *larger* in Magnitude.

If two elastic Chords are in all these Respects equal, and struck, they will vibrate together in equal Time, and emit the same Sound, which is called *Unison*.

If any Chord be proposed as a Base or Standard, it is called a *Monochord*, and that being sounded, gives a *Note of Comparison*; then, if another String of half that Length be taken, it will, *cæteris paribus*, sound a Note that is called an *Octave*, or an *Eighth above* the other. If another String of two-thirds of the Monochord be taken, it will produce a Note called a *Diapente*, or *Fifth above* the Base Note. A String three-fourths of the Monochord, will sound a Note call'd a *Diatassarion* or *Fourth*; and four-fifths of the Monochord make a *Third*.

These Notes are called *Concords*, of which the *Octave* and *Fifth* are reckoned *perfect*, and the rest imperfect in several Degrees. For in the *Diapason* there are *seven natural Notes*, besides that of the *Monochord* or *Base*, which is called the *Key-Note*, or simply, the *Key*. These Tones are made *higher* or *lower*, by taking Strings *shorter* or *longer*; and then the Music is said to be in a *sharp* or *flat Key*; and these *Flats* and *Sharps* adapt the *Air* of the Music to every Occasion, *melancholly* or *merry*, *grave* or *gay*. These Intervals of Musical Sounds, arising from the harmonical Length of Strings, are distinguished into *Tones* and *Semi-tones*, both in the *flat* and *sharp Key*, though they are of a different Quantity in each; and these two Keys, of thirteen Notes inclusive, make the *Diatonic Scale of Music*.

These Notes, or Musical Sounds, are wrote or represented by proper Characters in Books of Music, under the Names of *Brief*, *Semi-brief*, *Minum*,
K 4 Crotchet,

Crotchet, Quaver, Simi-quaver, Demi-semi-quaver, &c. from the longest to the shortest Note.

MUSICIANS have a Distinction of *common* and *triple Time*, which they are obliged to *keep* while playing; when the Notes are to be play'd very quick, they write over that Part, *Allègre*; when slowly, *Adagio*; when soft, *Piano*; when strong, *Forte*; and when the same Notes follow each other on different Instruments, it is called a *Figure*. If the same Part or Tune is to be repeated, they cry, *encora, encora, &c.* The *Musicians* and *Painters* borrowing their Terms of Art from the *Italians*, as we do those of *Cookery* from the *French*, to shew ourselves *People of Taste*.

P R A X I S XX.

On BOTANY.

BOTANY, or PHYTOLOGY, is a Science that describes the Nature, Kinds, and Properties of *Herbs, Plants, and Vegetables*, of all Sorts. A Book on this Subject is called an *Herbal*; and a Professor in this Sort of Knowledge is called a *Botanist, Herbalist, or Simpler*.

VEGETATION is the Way of Life and Growth of a Plant by an *original Construction* of *Parts*, or *Vessels*, which receive or imbibe the nutritious Juices of the Earth, and circulate the same through the Body of the Plant for its Growth and Nourishment.

A PLANT is found to consist of such *Vessels* as convey *Air*, and are therefore called *Air-Vessels*. Of another Sort much smaller, which draw up the *Sap* or *Nutrimment* from the Earth, and are called *Sap-Vessels*. These, together with some transverse *Ligaments*,

Ligaments, which bind them fast, make the *Body*, *Wood*, or lignous Substance of Vegetables.

The *Cortex*, or *Bark*, is the exterior Part of a Plant, and consists of a great Number of Cylicindric Shells of lignous Fibres or Vessels in their *fatal*, or *Embryo-State*; one of these next the Body of the Plant, is every Year supplied, and made to vegetate by the returning Sap, and thereby acquiring a lignous, or woody Consistence, is joined to the Wood or Body of the Plant, and makes the Accretion, or Increment of the Plant for that Year.

Botanists make a Variety of Distinctions in the *Kinds* and *Species* of Plants. The most vulgar is that in *Herbs*, *Shrubs*, and *Trees*. And with Respect to the Country, they are divided into *Indigenous*, or such as are Natives of our own Soil; and *Exotics*, or such grown in foreign Countries. With Respect to *Sex*, they are divided into *Male*, *Female*, and *Hermaphrodite* Plants. Some also are *Annual*, which live a Year; others are *Perennial*, which continue many Years. Some retain their Leaves all the Winter, and are called *Ever-greens*; others, whose Leaves fall off, are call'd *Deciduous*. Some grow only on Land, and are called *Terrestrial*; others only in Water, and are called *Aquatic*; and some both in Land and Water, and are termed *Amphibious*; those which grow in the Sea, *Submarine*.

Others distinguish Plants according to their several Parts, Shapes, and different Natures; as the *Fungous*, or Mushroom Tribe; all Sorts of *Mosses*; and the *Capillary* Plants.

Some Plants are distinguished by their *Leaves*; thus, such as have none, are called *Apetalous*; if one, *Monopetalous*; if three, *Trefoil*; if five, *Pentapetalous*, &c. Some are called *Corymbyferous*, having

a large discous Flower, as the *Marigold*. Some *Umbeliferous*, whose Flower spreads like an *Umbrella*. They are said to be *capitated*, when they have a compound Flower consisting of many single ones crowded together into one Head.

With Respect also to the Leaves, they are again divided into *Asperifoliate*, or Rough-leaved; *Verticillated*, whose Leaves grow by Pairs on the Stalk; *Graminifoliate*, Grass-leaved, &c. In Regard to the Seed, they are called *Monospermous*, which bear but one Seed; *Polyspermous*, if many Seeds; *Gymnodispermous*, having two naked Seeds; *Enangiospermous*, having the Seed contained in a Capsule or Case, &c.

With Regard to their Fruit; some are *Pomiferous*, which bear Apples; *Bacciferous*, which bear Berries; *Pruniferous*, which are all of the Plumb Kind. Those which bear their Fruit in long Cases or Pods, are called *Siliqueous* and *Leguminous* Plants. But as there is an infinite Variety in every Part of one Plant from another, it is impossible to come to any End in the Distinction and Arrangement of Plants.

The Parts of a Plant are the *Root*, the *Stem* or *Stalk*, the *Leaves*, the *Flower*, the *Fruit*, and the *Seed*.

The *ROOT* of a Plant admits of great Variety in its Form or Make; being in some *fibrous*; in some *tuberous*; in others, *bulbous*; others are *testiculated*, *grumous*, *granulous*, &c.

The *STALK*, *STEM*, or *TRUNK*, consists of many Parts, viz. the Pith in the Middle; the *Air* and *Sap-Vessels*, which make the *lignous*, or *woody Part*, or Body of the Tree; and the *Cortex*, or *Bark*, on the Out-side, as we have already mentioned.

The

The **LEAVES** of a Plant are considered as a Kind of *Lungs*, by which it perspires; they consist of an exceeding fine Ramification of Vessels; a green *Parenchymous* Substance; and a fine Cuticle covering the Whole. The Leaves are various, distinguished by their different Forms, *viz.* *pennated*, *ramose*, *sinuated*, *serrated*, *crenated*, *laciniated*, &c.

The **FLOWER** is the most exquisite Part of a Plant. It consists of the *Empalement*, *Calix*, or Cup, called the *Perianthum*; the *Petala*, or fine Leaves, which compose the Flower; the *Stamina*, or *Ghrives*; the *Apices*, or Summits, which grow upon their Tops; the *Farina*, or fine Dust, which is contained in them; the *Stylus*, or *Pistil*; and the *Matrix*, *Ovary*, or Seed-Case, below it.

The **FRUIT** is that Part which succeeds the Flower; and consists in general of a *Cuticle*, or Skin; a *Parenshyma*, or Pulp; *Branchery*, of various Vessels, and *Core*, including the *Seed* or *Kernel*.

The **SEED** of a Plant is that Part which contains the *Plantule*, or *Embrio-Plant* of the next Year; and requires to be put into the Earth, that its vegetive Juices may nourish, unfold, and cause it to grow into a Plant or Tree.

P R A X I S XXI.

On PHARMACY.

PHARMACY is the Art of making *Medicines*; and it has been usually distinguished into two Kinds, *Chemical*, and *Galenical*. The latter of which we treat of here, and the other under the *Praxis of Chemistry*.

The

The *Galenical Pharmacy*, or *Pharmacopœia*, is the Art of preparing Medicines, after the Method of *Galen*, in a gross Manner from the whole Substance of Vegetables, by compounding the various Parts of the same Plant, or different Plants together, to answer the Intentions of *Physic*.

The *Materia Medica* of the *Galenic Kind*, are all the Plants, Drugs, &c. sold in the Shop, and are therefore called *Officinal Simples*. The Artift, who makes and compounds these Medicines for Sale, is call'd *Pharmacopœius*, or *Pharmacopola*; that is, vulgarly, an *Apothecary*. The Book directing how such Medicines are to be made, is called a *Dispensatory*.

The *Officinal Simples* consist in general of *Herbs*, *Flowers*, *Barks*, *Roots*, *Seeds*, *inspissated Juices* or *Gums*; and of these are made and compounded many Sorts of *Officinal Medicines*, the Principal of which here follow.

Officinal Waters, which are of two Sorts, Simple and Compound. *Simple Waters* are drawn from Plants, and their several Parts by a *cold Still*. These are generally used as *Vehicles* to Things of greater Virtue.

Compound, or *Strong Waters*, are such as are drawn from a Mixture of Vegetable Substances infused in Spirits by an *Alembic*, or *hot Still*.

DISTILL'D SPIRITS differ very little in the Manner of making them from *Compound Waters*, and are nearly allied in their Nature, and answer the same Intentions.

OFFICINAL OILS are of several Sorts, viz. Oils by *Expression*, i. e. such as are procured by bruising and pressing the oleaginous Parts of Vegetables, as the *Seed*, *Fruit*, &c. Or Oils by *Infusion*, or *Decoction*, where the Subject is first bruised, then macerated for some Time in Oil, and then the
Whole

Whole is boil'd together, and the Oil strain'd off for Use.

INFUSIONS make a large Class of Medicines in common Use, since the Virtues of Plants are by infusing or steeping them in some convenient *Menstruum* easily drawn out, and made ready for Use.

APOZEMS, or DECOCTIONS, is that Class of Medicines which contain the Virtues of Vegetables, drawn out by boiling them in some proper *Menstruum*.

SYRUPS make that Form of Medicines where the Juices, Decoctions, &c. of Herbs are boil'd up with Sugar to a proper Consistence. But a Syrup, as a *Medicament*, answers little or no Purpose.

EXTRACTS are Medicaments made by evaporating the Decoction of Plants so far, that it acquires the Consistence of stiff Honey, or will stick to the Fingers. They are generally made with Water; but, if the Plant be *resinous*, it is made with *Spirits of Wine*.

MEDICATED WINES are another Form, made by infusing, or digesting proper Subjects in common Wine.

TINCTURES make a large and useful Class; they are also made by digesting the Ingredients in strong Liquors, or Spirits, which are afterwards drawn off by a gentle Heat, or fitted for Use.

ELIXIRS are made by strong Infusion, where the Ingredients are dissolved in the *Menstruum*, and give a thicker Consistence than a Tincture.

CONSERVES are a Form well known, where the Parts of a Plant are preserved by beating them up with a triple Quantity of fine Sugar.

CONFECTIONS are made with the Powders of some Ingredients mix'd up with the inspissated Juices

Juices of others, till they attain the Consistence of Honey.

ELECTUARIES are another Form, little different from the former; being made of *Conerves, Powder, Honey, &c.* to the Consistence of the *Pap* of a roasted Apple.

TROCHES, or *Lozenges*, are made of various Ingredients reduced to Powder, and made into a Paste with Mucilages, then roll'd thin like a Pancake, and stamp'd out in the Form of Wafers.

POWDERS, or *Species*, consist of Drugs, or Simples, reduced to Powder, either by *Trituration* in a *Mortar*, or by *Lewigation* with a *Porphyry Stone*, and *Muller*.

BALSAMS are the thick, odoriferous, and oily Juices of exotic Plants and Trees; though some are made or prepared from Plants of our own Growth.

UNGUENTS, or *Ointments*, are made by boiling up divers Drugs and Simples with Wax, Oil, Lard, &c. to a proper Consistence.

PLAISTERS are a Composition of *Oils, Wax, Rosins, Powder, &c.* to a stiff Consistence, in order to be spread upon Leather, and stick to the Part when a little warm'd.

These are the principal Forms which are kept in the Shop ready made; besides which there are many other extemporaneous Forms, according as the present Occasion may require; such are *Emulsions, Juleps, Potions, Linctusses, Bolusses, Gargarisms, Lotions, Collyrimus, Embrications, Fomentations, Liniments, Cataplasms, Glysters, Injections, Suppositories, Frontals, Epithems, Sternutatories, Saccuusses, Suffiments, Nodules, Cucuphas, Pessaries, Turundæ*; and many others, whose Forms would be tedious to describe, and whose Uses are oftentimes

times very inconsiderable, and only known to the miserable Part of Mankind.

P R A X I S XXII.

On CHEMISTRY.

CHEMISTRY is the Art of analysing natural Bodies by Fire, or disuniting and separating their constituent Parts, which by the Chemists are called, the *Principles*, or *Elements* of Bodies.

ALCHYMY is the pretended Art of the *Transmutation of Metals*, or changing them into *Gold*, which is what they call finding the *Philosopher's Stone*; but this is an Abuse of genuine Chemistry, though the vain Pretenders to it assume the Title of *Adepti*, or *Adepts*.

The Operations of this useful Art are many, the Principal of which here follow.

CALCINATION, which consists in reducing Bodies to a *Calx*, in order to fit them for *Pulverization*; or else to *vitriify*, or change them into a pellucid Substance, like *Glass*.

CLARIFICATION, or *Depuration*, is the Method of purifying; or rendering fine any Medicines; as *Decoctions*, &c.

DISTILLATION is the raising the humid Parts of Bodies in Form of Steam or Vapours, which are condensed by the Side of the Still, and descend in Drops, which make the proposed Liquor.

SOLUTION, or *Dissolution* of Bodies, is the dissolving the Cohesion of their Parts by some Fluid, called a *Menstruum*; as *Aqua-Fortis*, &c. and by which they are rendered fluid.

FERMENTATION consists in the *intestine Motion* of the Parts of Bodies which happens upon the Mixture of *Acids* and *Alkalies*, and otherwise; and which is attended more or less with an *Effervescence*; sometimes with an *Ebullition*; and in some Cases with an *Accension*, or Kindling into Flame.

DIGESTION is that Solution of Bodies, made in Menstruums, by the Assistance of Fire.

EXTRACTION is an Inspissation, or Thickening of a Solution, by evaporating the more fluid Part, as to reduce it to the Consistence of Honey.

CRYSTALLIZATION is in case of saline Solutions, where the humid Part being so far evaporated till a Pellicle appears, the Remainder, as it cools, will shoot into *Chrystals*.

SUBLIMATION is the raising and elevating the dry Parts of Bodies of a volatile Nature; and by that Means, what they call the *Flowers*, as of *Sulphur*, *Antimony*, &c.

PRECIPITATION is that Process by which the Parts of Bodies, dissolved in any *Medium*, are made to sink, or fall to the Bottom.

COHOBATION is only a *repeated Distillation*, or returning the Liquor first drawn off again upon the Subject, and after that again, and so on; in order to extract the Virtues more essentially, *volatilize Spirits*, &c.

AMALGAMATION is a Process employ'd about some Metals, in order to resolve and reduce them to a Kind of Metalline Paste, which is done by a Mixture of Quicksilver in a certain Proportion. Also, if the Mercury be evaporated, the *amalgamated Metal* is then reduced to a very fine Powder; and this is properly a Chemical *Pulverization*.

FILTRATION is the Method of making Liquors fine and clear by passing them through Paper, or Cords of Woolen, Cotton, &c. one End of which is laid into them, through which they ascend and run off *Guttatim*.

The Subjects of Chemistry are distinguished into three Kinds, or Kingdoms, viz. The *Fossil*, *Vegetable*, and *Animal Kingdom*.

The FOSSIL KINGDOM comprehends, 1. *Metals*, viz. *Gold*, *Silver*, *Lead*, *Copper*, *Iron*, *Tin*. 2. *Salts*; as *Sal-Gem*, *Salt-petre*, *Sal-Ammoniac*, *Borax*, *Alum*, &c. 3. *Stones*, *Vulgar* and *Precious*. 4. *Earths*, *Chalk*, *Clay*, *Marl*, *Sand*, &c. 5. *Sulphurs*; as *Arsenic*, *Brimstone*, *Bitumen*, *Orpiment*, &c. 6. *Semi-Metals*; as *Antimony*, *Cinnabar*, *Bismuth*, *Marcasites*, *Calamine*, &c.

The VEGETABLE KINGDOM affords, in great Plenty, Bodies the most pure and resolvable of all others; for by analyzing a Vegetable Substance, they procure, in various Operations, the following Parts or Principles, viz. *Water*, a *Spirit*, a *Salt*, an *Oil*, and an *Earth*, which is called *Caput Mortuum*.

The ANIMAL KINGDOM also, from every Part, whether *Bone*, *Flesh*, *Hair*, *Horn*, *Blood*, *Milk*, *Urine*, *Feces*, &c. affords, by a *Chemical Analysis*, the same Principles as before, viz. *Phlegm*, *Spirit*, *Salt*, *Oil*, and *Earth*; but these have different Qualities from others; thus, some are *acid*, some *alkaline*; some *fix'd*, and some *volatile*, &c.

The LABORATORY is stocked with Instruments of many Kinds, for the great Variety of *Chemical Processes*, but they are reducible to three general Heads, viz. 1. *Elements*; as *Fire*, *Water*, and *Earths* of various Sorts. 2. *Menstruums*; as *Air*, *Water*, *Spirits*, *Mercury*, and many others. 3. *Vessels*, or *Utensils*;

Utenfils; as Furnaces, Alembics, Stills, Retorts, Recipients, Cucurbits, Matrasses, Crucibles, Lingets, Coppels, Alludels, Siphons, &c.

P R A X I S XXIII.

ON ANATOMY.

ANATOMY is the Art of *dissecting Animal Bodies*, particularly the human Body. It is divided into four great Parts. 1. *Osteology*. 2. *Myology*. 3. *Splanchnology*; and, 4. *Angiology*.

OSTEOLOGY treats of the Fabric of the Bones, or the Structure and Compages of a *Skeleton*. In every Bone, the Anatomist considers the Figure with Respect to its prominent, or hollow Parts. The first is twofold, *viz.* An *Apophysis*, a Protuberance of the Bone itself; and an *Epiphysis*, which is a small Bone growing on the Extremity of a large one.

The Cavities of a Bone (externally) are also of two Denominations, *viz.* *Cotyla*, a deep one; and *Glone*, one that is more superficial.

The **ARTICULATION** of the Bones, or the Manner of their being joined together, is of three different Sorts, *viz.* 1. *Diarthrosis*, where there is a manifest Motion. 2. *Synchondrosis*, by Means of a Cartilage, and with a small and obscure Motion. 3. *Synarthrosis*, without any Motion at all.

DIARTHROSIS is again subdivided into three Sorts, *viz.* 1. *Enarthrosis*, when a large, round Head of a Bone is received into a large Cavity. 2. *Arthrodia*, when a flat Head is received into a shallow Cavity. 3. *Ginglymus*, when the Bones articulated mutually receive, and are received by each other.

SYNAR-

SYNARTHROSIS is also of three Sorts. 1. *Harmonia*, which is only a simple Contact of the Surfaces of Bones, without any Ingress. 2. *Sutura*, or *Suture*, when two Bones are mutually indented into each other like the Teeth of a Saw. 3. *Gomphosis*, when a Bone is socketed into another, as the Teeth in the Jaw-Bones.

The SKELETON consists of the following great Parts, viz. 1. The *Cranium*, or Skull, consisting of the *Sinciput*, *Occiput*, *Temples*, *Jaw-Bones*, *Teeth*, &c. 2. The *Spine*, or Back-bone, consisting of the various *Vertebrae* of the Neck, Back, Loins, *Os Sacrum*, and *Os Coccygis*. 3. The *Thorax*, or Breast, containing the Ribs, the *Sternum*, or Breast-Bone; the *Claviculae*, or Channel-Bones; and *Scapulae*, or Shoulder-Blades. 4. The *Pelvis*, or Basin made up of the *Os Sacrum*, *Os Coccygis*, *Ilium*, or Hip-Bone; *Os Pubis*, and *Os Ischium*, or *Coxendix*. 5. Bones of the Arm, viz. The *Humerus*, *Ulna*, *Radius*, and those of the *Metacarpus* and Fingers. 6. Bones of the Leg, viz. *Thigh-Bone*, the *Fibia* and *Fibula*-Bones of the Leg, the Bones of the Instep, and metatarsal Bones, with those of the Toes.

The Body is divided into three Regions, viz. The Head, the *Thorax*, and the *Abdomen*, or Belly; the upper Part of which is called the *Epigastrium*, and the Sides, the *Hypochondria*.

The common *Integuments* of the Body are as follow. 1. The *Epidernis*, *Cuticle*, or Scarf-Skin. 2. The *Cutis*, or thick Skin. 3. The *Membrana Adiposa*, or fat Membrane. 4. The *Membrana Carnosa*, or fleshy one; to these some add the Hair and the Nails.

The principal Membranes enclosing the Parts are. 1. The *Periosteum*, which covers the Bones.
2. The

2. The *Meninges*, which enclose the Brain. 3. The *Pleura*, which covers all the Cavity of the Breast. 4. The *Mediaſtinum*, which divides the Breast into Parts thro' the Middle from Top to Bottom. 5. The *Pericardium* involving the Heart. 6. The *Diaphragm*, or Midriff, dividing the Thorax from the *Abdomen*, and envelopes all its Contents. This Account of the Membranes may be looked upon as the introductory Part of

MYOLOGY, which is the Doctrine of the *Muscles*, or fleshy Part of the Body. A Muscle is a Bundle of fleshy and nervous Fibres, either Single or Compound; the whole, and every Part of which, is invested with its proper Membrane.

The *Muscle* arises from one Bone, by a tendinous Part called the *Head*, and is inserted into another Bone by another Tendon call'd the *Tail*. The Use of a Muscle is to move the several Parts of the Body by Contraction of the fleshy Fibres, and shortening the Muscles; thus the Part becomes bent, but is extended again by the same Action of its *Antagonist Muscle* on the other Side.

SPLANCHNOLOGY is that Part which treats of all the *Viscera*, or Bowels; as first, those of the Head, which are as follow. 1. The Brain and *Cerebellum*, supposed to secern the finest Parts of the Blood, call'd *Animal Spirits*, conveyed by the *Nerves* to all Parts of the Body. 2. The *Eye*, the Organ of *Sight*. 3. The *Ear*, the Organ of *Hearing*. 4. The *Nose*, the Organ of *Smelling*, and general *Emunctory* of the Brain. 5. The *Mouth* and *Tongue*, the Organs of *Taste*.

The *Viscera* of the Thorax are those contain'd in the Neck and Breast, viz. 1. The *Oesophagus*, or Gullet, the Instrument of *Deglutition*. 2. The *Trachea Arteria*, or Wind-Pipe, through which we breathe. 3. The *Lungs*, consisting of two Lobes,
the

the Organ of *Respiration*. 4. The *Heart*, and its *Auricles*, the grand Organ of *Animal Life*. 5. The *Thymus*, a Gland, whose Use is scarce known; and, 6. The *Breasts*, whose Glands separate the Milk from the Blood.

The *Viscera* of the *Abdomen*, are the following. 1. The *Omentum*, or Cawl, a fat Membrane appointed to contain and cherish the Intestines with Warmth. 2. The *Stomach*, whose Use is to concoct or digest the Aliments, and convert them into *Chyle*. 3. The *Intestines*, or *Guts*, connected by the Edge of a Membrane called, 4. The *Mesentery*, containing the *Lacteal* and *Lymphatic Vessels*. 5. *Receptaculum Chyli*, or Receptacle of the Chyle from the Lacteal Veins. 6. The *Pancreas*, or Sweet-bread, a conglomerate Gland, separates a Juice for diluting the Chyle in the *Duodenum*. 7. The *Liver*, which separates the Bile and the Gall from the Blood. 8. The *Spleen*, whose Use is not well known. 9. *Kidneys*, which separate the *Urine*, conveyed by 10. The *Ureters*, to 11. The *Bladder*. 12. The *Pudenda*, or Parts of Generation in Male and Female.

ANGIOLOGY treats of the Vessels; and according to their different Kinds, it is subdivided into three Parts, viz. 1. *Neurology*, which treats of the *Nerves*. 2. *Arteriology*, of the *Arteries*; and, 3. *Phlebotology*, of the *Veins*.

Neurology is the Doctrine of the Nerves, which are the immediate *Organs* of Sensation, but how, or in what Manner, is not yet, and very probably never will be understood; the Nerves all arise from the *Brain* and *Spinal Marrow*, and go from thence in Pairs; thus, one Pair goes to the *Eyes* for Vision, and therefore are called the *Optic Nerves*; another to the *Nose* for *Smelling*, called the *Olfactory Nerves*; a third Pair to the *Ears*, called the *Audi-*

tory Nerves; and a fourth Pair to the Tongue and Palate, called the *Gustatory Nerves*; with many others from the Brain; and, besides these, thirty Pair from the *Medulla Spinalis* to all Parts of the Body, for the *general Sense of Feeling*.

ARTERIOLOGY exhibits a general View of the Arteries, which convey the Blood from the Heart to all Parts of the Body for a *general Nutrition*. Their Coats are *Elastic*, and therefore, fitted for that *Pulsation*, which they receive from the alternate Action of the Heart, call'd the *Systole and Diastole*, viz. the Contraction and Dilatation of its *Ventricles*.

PHLEBOTOMY gives a Description of all the *Veins*, which, properly speaking, are only the Continuation of the *extreme capillary Parts* of Arteries, which they call the *Anastomosis* of the *Arteries* and *Veins*. The Use of the *Veins* is to return the Blood from all Parts of the Body to the Heart, from thence it goes to the Lungs, to be impregnated with fresh Spirits from the Air; which, together with the Chyle, is carried again by the Arteries to all Parts from the Heart: So wonderful is the *Animal Oeconomy*!

P R A X I S XXIV.

ON MEDICINE, or PHYSIC.

THE Science of MEDICINE consists in the Knowledge of such Disorders as the Human Body is liable to, and the Nature of such Drugs and Medicines as are proper to remove them when they happen; and the Person who professes this Skill, is called a *Physician*.

The *Art of Physic* is divided into five Parts, viz.
 1. *Physiology*, which contemplates the Nature of the Human Body. 2. *Pathology*, which treats of Diseases. 3. *Semeiotics*, which delivers what relates to the Signs, or *Prognostics* of Diseases. 4. *Hygiene*, which prescribes Rules for the Conservation of Health; and, 5. *Therapeutics*, which treat of the *Materia Medica*, and cure of Diseases.

PHYSIOLOGY explains the Nature and Structure of the Human Body, which see under the Praxis on *Anatomy*; besides which, it gives the proper Notions of *Life*, *Health*, and the *Balance* of *Nature*; that is, such a Disposition of the Solids and Fluids as is necessary to produce the requisite Secretion, and to keep all the Animal Functions under a due Regulation for the Production and Continuation of Health.

PATHOLOGY expounds the Nature of Diseases, in which Respect it is sometimes called *Nosologia*. Diseases are said to be *Idiopathic*, from a proper Affection of the Part; or *Sympathetic*, when they are produced from another Part affected. And they are called *Hereditary*, when derived from our Parents; or *Connate*, when we are born with them. If they soon terminate, they are said to be *Acute*, but *Chronic*, if of long Continuance.

The various States, or Stages of a Disease are thus distinguished; the Access, or Coming on, is called the *Arche*; the Growth or Progress, *Anabasis*; the Height of the Disorder, *Acme*; the Declension or going off, *Paracine*; and lastly, the End or Removal of it: And in Case the Distemper intermits, as *Agues*, *Fevers*, &c. the Fit is called a *Paroxysm* of that Disease.

ÆTIOLOGY is a Part of *Pathology*, which considers and assigns the *Causes* of Diseases; which are *internal* or *external*; *remote* or *proximate*. All these

these arise in general from what the Physicians call the *Non-Naturals*, viz. the *Gesta*, consisting of the Actions of the Body, and the Affections of the Mind; the *Ingesta*, as all Things taken into the Body; the *Retenta* and *Excreta*, or Things retain'd in, or excluded from the Body, whether *Salubrious*, *Recrementitious*, or *Morbose*; as the *Blood*, *Saliva*, *Urine*, *Semen*, the *Bile*, *Fæces*, &c. For, according as these Things are, such will be the *Idiosyncrasy*, or special Constitution of the Man, whether *humid*, *dry*, *bilious*, *sanguine*, *phlegmatic*, *melancholy*, &c.

SEMEIOTICS, as was said, treats of the *Pathognomonic* Signs, or *Phænomena* of Diseases, by which the Physician is assisted in making a Judgment of the Presence, Nature, State, and Event of the Disease. These Signs are of two Sorts, viz. *Diagnostic* and *Prognostic*; the former include all those Symptoms which indicate the Presence, Nature, and Intensity of the Disorder. The *Prognostic* Signs are those which shew the probable *Event* of the Disease, and the *Fate* of the Patient; and both the *Diagnosis* and *Prognosis* of the Disease depend principally on three Things, viz. the *Pulse*, *Respiration*, and *Urine*; to which may be added, the *Function* of the Part, the *Malignity* of the Disorder, the *Violence* of the Symptoms, the *Epidemical* Disposition of the Air, *Season* of the Year, *Age*, *Sex*, *Manner* of Life, &c.

HYGIEINE is the *Prophylætic* Part of Physic, or that which is employ'd in *preserving Health*, and *preventing Diseases*. Hence it prescribes Rules for the due Use, Application, and Regulation of the *Non-Naturals*, with respect to each Man's particular Habit of Body. Thus with regard to *Air*, it considers the Effects of a sudden Change; its being *dry* and *serene*, *cold* or *nitrous*, *hot* and *sulphureous*,

phurous, moist and foggy. As to *Food* or *Diet*, what may be the *Effects* of it, as it is *frumentaceous, legumenous, or animal*; thus also for *Drink, Exercise, Rest, Sleep, the Passions, &c.* it gives the proper *Rules* for their *Regulation*.

THERAPEUTICS deliver the *Methodus Medendi*, or practical *Method* of curing *Disease*; and for each particular *Disorders*, the *Materia Medica* supplies specific *Remedies*; as *Cardiacs, or Cordials*, for enlivening the *Heart*; *Cephalics*, for *Distempers* of the *Head*; *Stomachics*, for *Disorders* of the *Stomach*; *Hysterics*, for those of the *Uterus*. *Alexipharmics, or Febrifuges*, such as are good in *Fevers*; *Carminatives*, such as expel *Wind*; *Agglutinants*, which incrassate the *Fluids*; *Astringents*, are all Sorts of binding *Medicines*; *Absorbents*, such as absorb, and dry up superfluous *Humours*; *Analectics*, which cherish the *Nerves*, and renew *Spirits* and *Strength*; *Emollients*, such as soften and supple the *Parts*; *Deobstruents*, such as open *Obstructions*; *Diuretics*, which promote the *Discharge* of *Urine*; *Diaphoretics*, which procure *Sweat*, *Emetics*, which cause *Vomiting*; *Cathartics* are all Sorts of *Purges*; *Narcotics, or Hypnotics, or Opiates*, are all such Things as cause *Sleep*; *Sternutatories* are those which cause *Sneezing*. *Refrigerants* mitigate *Heat*, and cool the *Body*. Besides these, there are many other *Classes* of less *Note*.

P R A X I S X X V .

O n C H I R U R G E R Y .

CHIRURGERY, or *Surgery*, (in short) is that useful Branch of the *Healing Art*, which consists in *Manual Operation*, with proper Instruments.

Such Disorders as demand the Surgeon's Care, and make the Subject of his Art, are, 1. All Kinds of *Tumours*, or Swellings. 2. *Ulcers*, or running Sores. 3. *Fistulas*. 4. *Inflammations*, or strumous Disorders. 5. All Kind of *Wounds*. 6. *Gangrenes*, or Mortifications. 7. *Dislocations*, or disjointed Limbs. 8. *Fractures*, or broken Bones.

The most common and considerable *Tumours* which infest the Body, are, 1. *Phlegmonic*, or inflammatory, as the *Ophthalmia*, in the Eye; the *Angina*, or Quinsy, in the Throat; *Pleurisy*, in the Side; *Peripneumony*, in the Lungs; *Bubo*, in the Groin, &c. 2. *Oedematous*, or watery Humours; contained in a *Cystis*, or Bag; as the *Atheroma*, *Steatoma*, *Meliceris*, &c. 3. *Scirrhus* *Tumours*, consisting of a hard Part or *Induration*, called a *Scirrbus*, *Scirrhomia*, or *Scirrholosis*. 4. *Aqueous Tumours*, *Hydroceles*, and Dropsies of all Kinds. 5. *Strumous Swellings*, or *Scrophulas*, as the *King's Evil*, and such like Diseases.

ULCERS are of various Kinds also; and distinguished by different Names, as the *Herpes exedens*, *Phagædæna*, *Nome*, *Carcinoma*, or Cancer, *Lupus*, *Noli-me-Tangere*, *Achor*, *Ozæna*, and many others; all which proceed from disordered Humours, or a *Cacochimia* eroding the Parts; or from Wounds, which in Time degenerate to Ulcers.

FISTULA

FISTULAS are but inveterate Ulcers with callous Lips, and penetrating with long, sinuous Cavities quite to the Bone; as the *Fistula Lacrymalis*, *Fistula in Ano*, &c. And as to *Inflammations*, and *strumous* Disorders, as their Seat is in the Glands, so by corroding them they produce *scrophulous Indurations* of many Sorts, which can't be particularly enumerated.

WOUNDS happen many Ways, viz. *Punctures*, by sharp-pointed Instruments, *Incisions*, or Cuts, *Contusions*, or Bruises, by any violent Force; and also all *Sprains*, or *Strains*, occasioning a violent and painful Tension of the Parts, come under this Class.

A GANGRENE is, in its first State, usually call'd a Mortification; but when the Part is quite dead, or discolour'd and cold, it is then call'd a *Sphacelation*, or *Sphacelus*.

DISLOCATIONS, which the Surgeons sometimes call *Luxations*, are the *Disjointing of Bones*, and this may happen to most of the Articulations in the bony System.

FRACTURES are the last Class of Diseases which demand the Chirurgic Art; these are distinguished into two Sorts, viz. *Simple Fractures*, which happen without a Wound; and *Compound Ones*, when they are attended with Wounds in the Flesh of the affected Part.

The *Intentions* and Manner of Cure in Surgery are various, as 1. By *Derivation*, or drawing the Humours off the Part towards others on the same Side. 2. *Revolution*, or drawing them off towards the opposite Part. 3. *Discussion*, or dissipating the peccant Matter into the Mass of Blood. 4. *Suppuration*, or *Maturation*, or bringing the Matter of the Tumour to Pus laudabile, or fit for Discharge. 5. *Digestion*, the promoting such a Discharge by Medicines.

dicines. 6. *Mundification*, a cleansing the Part by *Detergent Medicines*, fitting it for 7. *Incarnation*, which is Healing up of the Wound with new Flesh. 8. *Cicatrization*, which is the inducing a new Skin over the Part, to leave as small a *Cicatrix* or *Scar*, as possible.

These Intentions all consist in Application of Medicines; but others require Manual Operations, as, 1. *Amputation*, or cutting off a Limb. 2. *Arteriotomy*, or bleeding an *Artery*. 3. *Phlebotomy*, or cutting a *Vein*. 4. *Bronchotomy*, making an Incision in the Wind-pipe. 5. *Castration*, or cutting out of the *Testicles*. 6. *Cauterizing*, or burning away the Part either with an *actual* or *potential Cautery*. 7. *Cupping*, a raising the Cuticle for *Scarification*. 8. *Cystotomy*, an Opening of the Bladder to extract the Stone. 9. *Fonticulation*, a making *Issues*, *Seatons*, &c. 10. *Lithotomy*, a Cutting for the Stone. 11. *Tapping*, a perforating the *Abdomen* in the Dropsy. 12. *Trepanning*, Opening the Scull in circular Perforations. 13. *Reduction* of dislocated Bones, with proper Ligatures, Bandages, &c.

The Surgeon has likewise his particular Classes of Medicines; as, *Incarnatives*, which heal up with Flesh; *Anodynes*, which assuage Pain; *Detergents*, which cleanse the Wound; *Desiccatives*, which dry them up; *Cautsics*, which burn to an *Eschar*; *Epulotics*, which cicatrize Wounds; *Lithontriptics*, which break away the Stone in the Bladder; *Narcotics*, which stun the Pain; *Palliatives*, used to palliate incurable Wounds; *Phagedænic*s, which eat away fungous, or proud Flesh; *Styptics*, which stop Hæmorrhages, or profuse Bleeding; with many others, as *Balsamics*, *Aperients*, *Divestives*, *Repellents*, *Resolvents*, *Suppuratives*, *Ripeners*, *Sclerotics*, *Vesicatories*, &c. whose Intentions of Cure are indicated by their Names.

On POLITY, and JURISPRUDENCE. 221

In the Surgery we view his terrible apparatus of Instruments ; the Saws, Knives, Scissars, *Catheter*, *Cauterics*, *Cycliscus*, *Dentagra*, *Forceps*, *Lancets*, *Probe*, *Trepan*, *Perizomas*, *Scala*, *Scarificatory*, *Syringes*, &c. too commonly known.

P R A X I S XXVI.

On POLITY, and JURISPRUDENCE.

POLITY is the art of conducting the Affairs of a *Public Society*, or *Community*, so as to procure and preserve the Interest and Happiness of the *Whole*, and each *Individual*, in the highest Degree possible.

A *SOCIETY* is distinguished into three Sorts, viz. A *Family*, a *City*, and a *Republic*, or *Nation*. And as these all consist of Persons in a different Relation to each other, so various and different Forms of Government are found necessary for each, which go under the following Denominations.

OECONOMICS respect the Order and Government of a *FAMILY* as it consists of various Branches in a proper Subordination ; as, 1. *Parents*, *Father* and *Mother*. 2. *Children*, *Sons* and *Daughters*. 3. *Servants* and *Domestics*, that are *Aliens* to the Family. The *paternal Care* of the Parents ; the *filial Duties* of the Children, and the *Servitude* of the rest, are the Subject of this *oeconomical* Government, which was formerly called *Patriarchal*, because the *Father*, or *Ruler of the Family*, was stiled *Patriarch*.

POLITY is (according to the Etymology of the Word) the *Government of a City*, which Power is vested in the principal Persons, called *Magistrates*, consisting in most *Cities* and *incorporated Towns* of

222 On POLITY, and JURISPRUDENCE.

a *Mayor, Aldermen, and Common-Council-Men*; some Towns, instead of a *Mayor*, have a *Portreve, Bailiff, or a Constable*, for their Chief Magistrate. But the Word *Polity*, or *Policy*, now is used to denote in general any Sort of Government in any *State*; and the Act is called *Politics*; and those well skill'd in it, *Politicians*.

The Forms of Government respecting the People are many; for Instance, it is called, 1. THEOCRACY, when they receive the Laws and Rules of Government immediately from God himself; as that of the *Jewish State* under *Moses*. 2. MONARCHY, when there is one Supreme Head of the State, who is call'd *Emperor, or King*; and such a Nation is called an *Empire, or Kingdom*. 3. ARISTOCRACY, when the Supreme and Legislative Power is vested in a few of the highest Rank, who govern jointly. 4. DEMOCRACY, when the Administration is in the Hands of the *Common People*.

All Government consists in the Administration of Justice, according as it is prescribed by the Laws of *Nature*, by the written Laws of the *Land*, or by ancient Usage or Custom.

The LAW of NATURE is what we, in short, call *Natural Rectitude, or Right*; and is the Original Rule of Justice, whether *Commutative or Distributive*. By this the *Life and Property* of every Person is made sacred, and the immediate Care of every Ruler; and indeed, from hence arises

The LAW of NATIONS; this consists of Public Acts and Statutes, which provide for the Public Utility, and Necessity of the People, considered as a Body corporate, and ordain and decree whatever relates to *Obedience and Subjection, Dominion and Government, War and Peace, Contracts, Division of Lands, Foundation of Societies, and the Constitution of Cities, Towns, and Villages*.

The

The CIVIL LAW is that which is peculiar to any Country or People; and administers that Justice which arises from their particular Situation, and special Relations and Circumstances. When this respects a City, or *Borough-Town*, it is called their *Municipal Law*. The Professors of this Sort of Law are called *Civilians*.

The CIVIL LAW of the *Romans*, and which have ever since been of great Use to all the Nations of the World, are contained in four Volumes, *viz.* 1. The DIGEST, or *Pandects*, containing a Collection of all that was material in the old Law-Books, to the Time of *Maximinus*. The CODE, in twelve Books, contains an Abridgement of the Answers and Decisions of twenty-six Emperors, and their Councils, from *Adrian* to the Time of *Justinian*. 3. The INSTITUTES, which are a Compendium of the Digest, by Order of *Justinian*, for the Use of the young *Civilian Students*. 4. The AUTHENTICS, being a Body of new *Constitutions*, set out by the Authority of the same Emperor *Justinian*, after the Code. Besides these, there was, 5. The *Theodosian Code*, published for the better Understanding of the *Justinian Code*. And, 6. The Book of FUNDS, containing the Laws of *Tenures* and *Fees* between *Lords* and *Vassals*.

The Laws by which *England* is governed are as follow, 1. CIVIL LAW, before mentioned. 2. COMMON LAW, containing a Summary of all the Laws, Rights, and Privileges of the People of *England*, in what is called the *Magna Charta*, or great Charter of *English Rights*. 3. STATUTE LAW, consisting of Statutes, Acts, and Ordinances of King and Parliament. 4. CANON LAW, consisting of the Canons of General Councils, and national and provincial Synods, with the Decrees of Popes, the Judgment of ancient Fathers, &c. used

224 On POLITY and JURISPRUDENCE.

in *Ecclesiastical Affairs*. 5. MARTIAL LAW, used in all *Military and Maritime Affairs*. 6. FOREST LAW, which relates to the Regulation of *Forests*, and the *Chace*. 7. To these may be added the LAW of CUSTOM, which is remarkable in some Parts of *England*.

The COURTS of JUDICATURE for the Administration of *Justice and Right*, are, 1. The *High Court of PARLIAMENT*, consisting of KING, *Lords*, and *Commons*. 2. The KING'S BENCH, in which all the *Pleas* of the *Crown*, or what concerns the *Life, Peace, and Property* of the *Subject*, is here transacted. 3 The *Court of CHANCERY*, designed to mitigate the *Rigour* of *Common Law* and to set Things upon the Footing of *Right*; and is therefore called the *Court of Equity*. 4. The *Court of COMMON PLEAS*, in which are debated the *usual and common Pleas*, or Causes between *Subject and Subject*, according to the *strictest Rules of Law*. 5. The *Court of EXCHEQUER*, in which are tried all Causes relative to the *Revenue and Treasury* of the King. 6. The *Court of ADMIRALTY*, which takes Cognizance of all Affairs *Civil and Military* on the Seas. These are the *great Tribunals* of the Realm; to which might be added many other inferior Courts; and indeed, to all of them we might premise the *most august Assembly*, called the PRIVY-COUNCIL, for advising and counselling the King in all weighty Matters of State.

The GREAT OFFICERS of the CROWN or STATE, are in Order of *Precedency* as follow, viz. The *Lord High Steward of England*; the *Lord High Chancellor*; the *Lord High Treasurer*; the *Lord President of the Privy-Council*; the *Lord Privy-Seal*; the *Lord Great Chamberlain of England*; the *Lord High Constable of England*; the *Earl Marshal of England*; the *Lord High Admiral of England*.

England. But the Offices of *High Steward* and *High Constable* are not standing, but made *pro Tempore*; as at *Coronations*, *Arraignment of Peers*, &c.

The NOBILITY of *England* consist in the following Orders or Degrees, viz. The KING; the PRINCES of the Blood; a DUKE; stiled, *Most High, Puissant, and noble Prince*. A MARQUIS; stiled, *Most Noble and Puissant Prince*. An EARL; his Title is, *Most Noble and Puissant Lord*. A VISCOUNT; his Title, *Most Noble, Potent, and Honourable*. A BARON; stiled, *Most Noble, and Right Honourable*. The Lower Degrees of Nobility, called the Commons of *England*; are, a *Baronet*, a *Knight*, *Esquire*, and *Gentleman*. But though the Title of GENTLEMAN be the lowest in the *honorary List*, it is the Highest of all in *real Dignity and Merit*.

P R A X I S XXVII.

Of HERALDRY.

HERALDRY is the Art of *Blazoning a Coat of Arms* in proper *Colours and Metals*, and is of two Parts, *Blazoning* and *Marshalling*. *Blazon* is the Explanation of *Coat-Armour* in such significant Terms of *Colours, Figures, Postures, &c.* as may indicate the *Virtues and Merits* of the *first Bearers*. And *Marshalling* is the Disposition of several *Coats*, (originally belonging to divers Families) within one *Shield*, or *Escutcheon*, with all the *Armorial Ensigns* thereto belonging.

The ESCUTCHEON is the whole Frame of the Coat of Arms, of which the interior Part is called the *Field*, which is charged with all those Figures and Characters that are vulgarly called the *Arm*;

and are taken from all Parts of the Creation, as *Angels, Men, Beast, Fowls, Fishes, Insects, Plants, Celestial Bodies, &c.*

The Points, or Parts of an Escutcheon, are Nine, viz. Three on the upper Part, placed horizontally, called the *Middle Dexter*, and *Sinister Chief*. Three in the Middle of the Shield, called the *Collar, Fess*, and *Nombril Points*; and three at the Bottom, called the *Dexter, Middle*, and *Sinister Base Points*.

TINCTURES in Heraldry are the *Armorial Colours*, with which the Ensigns or Charges are painted. These are of three Sorts, viz. *Metals, Colours*, and *Furs*; these for common Gentlemen, are *Yellow, Or*; *White, Argent*; *Black, Sable*; *Red, Gules*; *Blue, Azure*; *Green, Vert*; *Purple, Perpure*; *Orange, Tenne*; and *Murry, Sanguine*.

But for Noblemen, these Tinctures are called *precious Stones*, viz. *Topaz, Pearl, Diamond, Ruby, Sapphire, Emerald, Amethyst, Jacinth, Sardonyx*. And for *crowned Heads*, they are blazoned under the Characters of the *Planets*; as, *Sol, Luna, Saturn, Jupiter, Venus, Mercury, Dragon's-head, Dragon's-tail*; all which denote the Colours above respectively. The two last Tinctures are counted *Stainant*, or *Stains*, and are used with *Abatiments*, for a Mark of Disgrace in the Bearer.

The CHARGES (called *Ordinaries*) placed on the Field in *Court-Armour*, are many, but the principal and most honourable are the following, viz. the *Cross*, the *Chief*, the *Pale*, the *Bend*, the *Fess*, the *Inescutcheon*, the *Chevron*, the *Saltier*, the *Bar*. Besides which, there are Ten of less Note, viz. the *Gyron*, *Orle*, *Pile*, *Quarter-Dexter*, *Quarter-Sinister*, *Canton-Dexter*, *Canton-Sinister*, *Flanch*, *Flasque*, and *Voider*. These all have a Kind of *Hieroglyphic* Intention, and were originally intended to denote the *Abilities, Authority, Achievements*,
and

and Merits of the Bearer; though they are now regarded as little more than Symbols or Ensigns of Rank and Dignity.

The *Lines* which bound these Charges have divers remarkable Forms, which are esteemed as additional Notes of Distinction; and are named with the Charge in Blazoning; as, he bears *Azure*, a *Chief inverted*, a *Pale ingrailed*, a *Fess indented*, &c.

The Sons of a Family are denoted by particular Charges; thus, the first, or eldest Son, bears a *Label* with three Points; the second Son, a *Crescent*; the third, a *Mullet*; the fourth, a *Martlet*; the fifth, an *Annulet*; the sixth, a *Fleur-de-lis*. Then, the eldest Son of the second Family bears a *Crescent* with a *Label* on it; the second Son, a *Crescent* with a *Crescent*; the third, a *Crescent* with a *Mullet*, and so on; by which the Branches or Houses of each respective Family are distinguished.

But there are Bearings of Armour, called *Abatements*, which are Badges of *Disgrace*, implying some ungentlemen-like or dishonourable Action, Quality, or Stain, in the Bearer. Of these the *Armourists* have nine, viz. A *Square Turf* in the Middle of the Field; an *Inescutcheon reversed*; a *Point parted Dexter*; a *Point in Point*; a *Point Champaine*; a *plain Point*; a *Gore*; a *Gusset*; and lastly, the *whole Coat reversed*, which is the worst of all.

MARSHALLING is the second Part of *Heraldry*, which consists in an orderly ranging and disposing of Things, *within and without* the Escutcheon.

Within the Escutcheon; Coats of different Families are marshalled on Account of *Descent*, *Alliance*, *Marriage*, *Adoption*, Gifts of the Sovereign, &c. which is also called, *Quartering Coats of Arms*.

The exterior Ornaments of an *Atchievement* are,
1. The *Helmet*, or Head-Piece, in Armour on the
Top:

Top. 2. The *Mantle*, or Military Habit used in ancient Time, with its *Curlings*, and jagged Scantlings. 3. The *Crest* or *Cognizance*, this is placed on the highest Part of the Helmet; and is a *Crown*, *Wreath*, *Chapeau*, &c. 4. *Supporters*, or *Cotises*, in the Arms of Noblemen only. 5. The *Escrol*, or *Compartment*, on which the *Supporters* stand; and, 6. The *Motto*, or *Device*. When a Person dies, and his Arms are fixed on the Front of the House, it is then called a *Hatchment*, which for a Woman, is always in Form of a *Lozenge*.

The *College of Herald*s consist of a *HEAD*, who is the *Earl Marshal of England*, four *KINGS of Arms*, *Garter*, *Clarencieux*, *Norroy*, and *Bath*. Eight *HERALDS*; *Richmond*, *Lancaster*, *Chèster*, *Windsor*, *Somerset*, *York*, *Hanover*, *Brunswick*; besides one extraordinary, *Mowbray*, Four *PURSUIVANTS*, or *MARSHALS*; *Rouge-cross*, *Rouge-dragon*, *Portcullis*, and *Blue Mantle*. Besides these, there are two extraordinary, v z. *Blanch-lion*, and *Rouge-rose*. As *Garter* is principal *King of Arms* in England, so *Lion* is in Scotland, and *Ulster* in Ireland.



A
C A T A L O G U E
O F

Such Books, in the *English* Language, as we judge most proper to be read upon the Liberal ARTS and SCIENCES ; arranged agreeably to the Order wherein the Lessons upon these Subjects are exhibited in the third Part of the preceding INTRODUCTION.

I. T H E O L O G Y.

Quarto.

- 1 **B**utler's Analogy of Religion, Natural and Revealed.

Octavo.

- 2 Addison's Evidences of the Christian Religion.
3 Atterbury's (Bishop of *Rochester*) Sermons, 4 vol.
4 Barrow's Sermons, 6 vol.
5 Cheyny's Philosophical Principles of Religion.
6 Clarke's Discourse concerning the Being and Attributes of God ; the Obligations of natural Religion, and the Truth and Certainty of the Christian Religion.
7 Foster's Sermons, 4 vol.
8 Gibson's (Bishop of *London*) Pastoral Letters to the People of his Diocese, in Defence of the Christian Religion.
9 Grotius on the Truth of the Christian Religion, by *Clarke*.
10 Prideaux's Connection of the Old and New Testament, in the History of the Jews and neighbouring Nations, from the Declension of the Kingdom of *Israel* and *Judah* to the Time of Christ, 3 vol.

- 11 Sherlock on Death.
- 12 ——— on Divine Providence.
- 13 ——— on future Judgment.
- 14 Sherlock's (Bishop of *London*) Sermons, 3 vol.
- 15 Tillotson's Sermons, 12 vol.
- 16 Whole Duty of Man.

II. MORALITY.

Folio.

- 17 Puffendorf on the Law of Nature and Nations, with Notes, by *Barbeyrac*.

Quarto.

- 18 Hutcheson's System of Moral Philosophy.

Octavo.

- 19 Hutcheson's Introduction to Moral Philosophy.
- 20 ——— On the Passions.
- 21 Cicero's Offices, by *Guthrie*.
- 22 Hume's Enquiry concerning the Principles of Morals.
- 23 ——— Essays Moral and Political.
- 24 Pope's Ethic Epistles.
- 25 Seneca's Morals.
- 26 Gay's Fables.

III. PAGANISM.

Folio.

- 27 Broughton's Dictionary of all Religions.

Octavo.

- 28 Kenner's Antiquities of Rome.
- 29 King's History of the Heathen Gods.
- 30 Potter's Grecian Antiquities, 2 vol.
- 31 Ross's View of all the Religions in the World.

IV. MYTHOLOGY.

Octavo.

- 32 Æsop's Fables by Croxal, L'Estrange, &c.
- 33 Banier's Mythology and Fables of the Ancients, explain'd from History, 4 vol.

- 34 Ovid's *Metamorphoses*, with Notes.
35 Lucian's *Dialogues*, by *Dryden*.

V. R H E T O R I C.

Octavo.

- 36 Cicero upon the Character and Qualifications of an Orator, by *Guthrie*.
37 Quintilian's *Institutes of Eloquence*, by *Guthrie*.
38 Sheridan's *British Education*.
39 Holme's *Rhetoric*.

VI. L O G I C.

Octavo.

- 40 Duncan's *Logic*.
41 Locke's *Essay on Human Understanding*.

VII. P O E T R Y.

Octavo.

- 42 Butler's *Hudibras*.
43 Dryden's *Works*.
44 Milton's *Poetical Works*.
45 Pope's *Poetical Works*.
46 Shakespear's *Works*.
47 Swift's *Works*.
48 Thomson's *Works*.
Waller, Cowley, Prior, Addison, &c. &c.

VIII. G E O G R A P H Y.

Folio.

- 49 Compleat System of Geography, 2 vol.

Octavo.

- 50 Gordon's *Geographical Grammar*.
51 Salmon's *Geographical Grammar*.
52 ——— *Gazeteer*.
53 Varenus's compleat System of General Geography, 2 vol.

IX. CHRONOLOGY.

Folio.

54 Usher's Annals of the World.

55 Marthal's Tables.

Quarto.

56 Newton's Chronology.

*Octavo.*57 Strauchius's Breviarium Chronologicum, by
Sault.

X. ASTRONOMY.

Octavo.

58 M. de la Caille's Elements of Astronomy, deduced from Observations, and demonstrated upon the Mathematical Principles of the Newtonian Philosophy, by Robertson.

59 Gregory's Elements of Astronomy.

60 Keili's Astronomical Lectures.

61 Whiston's Astronomical Lectures.

XI. HISTORY.

Folio.

62 Burnet's (Bishop) History of the Reformation of the Church of England, 3 vol.

63 Camden's Britannia, or a History of all the Counties of England, Scotland, Wales, and the Islands adjoining.

64 Cox's History of Ireland, from the Conquest to the present Time.

65 Davies's History of the Caribbee Islands

66 Giannone's History of Naples, 2 vol.

67 Guthrie's General History of England, from the Invasion of the Romans under Julius Cæsar to the late Revolution, 5 vol. with Ralph's Continuation.

68 Hill's History of the Ottoman Empire.

- 69 Hughes's natural History of Barbadoes.
- 70 Kämpfer's History of Japan, with a Description of the Kingdom of Siam, 2 vol.
- 71 Lediard's Naval History of England in all its Branches, from the Norman Conquest in the Year 1066, to the Conclusion of 1734. 2 vol.
- 72 Maitland's History of London, from its Foundation by the Romans to the present Time.
- 73 ——— History of Edinburgh, from its Foundation to the present Time.
- 74 Mariana's general History of Spain, by *Stevens*.
- 75 Mezeray's general Chronological History of France; beginning before the Reign of King Pharamond, and ending with the Reign of King Henry IV. containing both the civil and ecclesiastical Transactions of that Kingdom.
- 76 Raleigh's (Sir Walter) History of the World.
- 77 Scott's History of Scotland.
- 78 Smith's general History of Virginia, New-England, and the Summer-Isles.

Quarto.

- 79 Baker's History of the Inquisition in Portugal, Spain, Italy, and the East and West-Indies, in all its Branches.
- 80 Bower's History of the Popes from the Foundation of the See of Rome to the present Time.
- 81 Sprat's History of the Royal Society: With a Supplement, by *Birch*.

Octavo.

- 82 Arrian's History of the Expedition of Alexander the Great, translated by *Rooke*, 2 vol.
- 83 Ashmole's History of the most noble Order of the Garter, and the several Orders of Knighthood in Europe.
- 84 Banck's History of the House of Austria and the German Empire.
- 85 British Empire in America, containing the History

- story of the Discovery and Settlement of all the British Colonies in America, 2 vol.
- 86 Brockwell's History of Portugal; to which is added, the History of Brazil and all the other Dominions of the King of Portugal.
- 87 Buchanan's History of Scotland from the Reign of Fergus, the first Founder of the Scottish Monarchy, to the Reign of King James VI. of Scotland, and I. of England.
- 88 Chalons's History of France to the Death of Lewis XIII. 2 vol. continued in Voltaire's Age of Lewis XIV. and History of the War in 1741, 2 vol.
- 89 Clarendon's History of the Rebellion and Civil Wars of England, begun in the Year 1641, 6 vol.
- 90 ——— History of the Rebellion and Civil Wars of Ireland.
- 91 Connor's History of Poland, 2 vol.
- 92 Crull's ancient and present State of Muscovy, 2 vol.
- 93 Daniel's History of France, from the Time the French Monarchy was established in Gaul, to the Time of Lewis XV. 5 vol.
- 94 Dion Cassius's History, containing the most considerable Passages under the Roman Emperors, from the Time of Pompey to the Reign of Alexander Severus; translated by Manning, 2 vol.
- 95 Du Halde's general History of China, including an exact Account of their Customs, Manners, Ceremonies, Arts and Sciences, 4 vol.
- 96 Echard's general Ecclesiastical History, 2 vol.
- 97 Herodotus's Egyptian and Grecian History; by Littlebury, 2 vol.
- 98 Herrera's general History of the vast Continent and Islands of America, commonly called the West-

- West-Indies, from the first Discovery thereof;
with an Account of their Antiquities, 6 vol.
- 99 Holland, (History of the Republic of) from its
first Foundation to the Death of K. William III.
also a Description of the United Provinces, 2 vol.
- 100 L' Estrange's (Sir Roger) Josephus, 3 vol.
- 101 Livy's Roman History, with *Friensheim's* Sup-
plement, 6 vol.
- 102 Machiavel's History of Florence.
- 103 Moguls and Tartars (History of the) with a
Description of the Countries they inhabit, 2 vol.
- 104 Ockley's History of the Saracens, 2 vol.
- 105 Puffendorf's Introduction to the History of the
principal Kingdoms and States of Europe, with
an Appendix containing the States of Italy.
- 106 Rapin's History of England, from the earliest
Accounts to the Revolution, with *Tindal's* Con-
tinuation to the Accession of George II. 28 vol.
- 107 Rapin's Abridgment of the History of England;
being a Summary of Rapin's History and Tindal's
Continuation, with the Heads and Monuments
of the Kings, &c. 3 vol.
- 108 Rollin's ancient History of the Egyptians, Car-
thaginians, Medes, Persians, &c. 10 vol.
- 109 ~~Rollin's~~ Roman History, from the Foundation
of Rome to the Battle at Actium; that is, to the
End of the Commonwealth.
- 110 Salmon's general History of the several Na-
tions of the World.
- 111 ~~Salmon's~~ Modern History, describing the Situ-
ations, Persons, Habits, Manners, Laws, Cus-
toms, Arts and Sciences, Trades, Plants, Ani-
mals, and Minerals of all Nations, 32 vol.
- 112 Savage's History of Germany, containing the
Lives and Reigns of all the Emperors of Ger-
many, 2 vol.
- 113 ~~Savage's~~ History of the Turks, 2 vol.

- 114 Scheffer's History of Lapland.
 115 Temple's Introduction to the History of England.
 116 ———— Memoirs of Christendom, 2 Parts.
 117 Universal History from the earliest Account of Time; the antient History in 21 vol.
 118 Voltaire's general History and State of Europe, from the Time of Charlemain to Charles V.
 119 Xenophon's Cyropædia; or Institution of Cyrus, by *Ashley*, 2 vol.
 120 ———— Expedition of Cyrus into Persia, and the Retreat of the 10,000 Greeks, by *Spelman*, 2 vol.
 121 History of the Affairs of Greece.

XII. PHYSIOLOGY, XIII. PNEUMATICS,
 XIV. OPTICS, XV. HYDROSTATICS,
 and, XVI. MECHANICS, *comprizing natural and experimental Philosophy.*

Folio.

- 122 Lord Bacon's Works 3 vols.
 123 Boyle's Works 5 vols.
 124 Hill's Natural History; or a Description of the Animals, Vegetables, and Minerals of the different Parts of the World, 3 vol.

Quarto.

- 125 Bacon's Philosophical Works, abridged by *Shaw* 3 vol.
 126 Boyle's Philosophical Works, abridged by *Shaw*, 3 vol.
 127 Desagulier's Course of Experimental Philosophy, 2 vol.
 128 Galileus's Mathematical Discourses relating to Mechanics and local Motion, by *Weston*.
 129 Molyneux's Contrivance of adapting a Telescope to an horizontal Dial. Collins's Description

tion and Use of four several Quadrants, two great ones and two small ones.

- 130 ———— Treatise of Dioptrics, wherein the various Effects and Appearances of spheric Glasses, both convex and concave, single and combined in Telescopes and Microscopes, are explained.
- 131 Pemberton's View of Sir Isaac Newton's Philosophy.
- 132 Smith's compleat System of Optics, 2 vol.
Octavo.
- 133 Baddam's Memoirs of the Royal Society, 10 vol.
- 134 Baker's Employment for the Microscope.
- 135 ———— Microscope made easy.
- 136 Barlow's Survey of the Tides.
- 137 Berkley's Theory of Vision.
- 138 Bradley's Philosophical Account of the Works of Nature.
- 139 Brooke Taylor's Method of Perspective.
- 140 Burner's Theory of the Earth.
- 141 Derham's Physico-Theology.
- 142 Emerson's Principles of Mechanics.
- 143 Gravesand's Mathematical Elements of Natural Philosophy, by Desaguliers, 2 vol.
- 144 Hales's Statical Essays, 2 vol.
- 145 Hauksbee's Physico-Mechanical Experiments, on various Subjects.
- 146 Hellsam's Lectures in Natural Philosophy, by *Bryan Robinson*.
- 147 Hill's Essays in Natural History and Philosophy, containing a Series of Discoveries by the Assistance of Microscopes.
- 148 Hooke's Philosophical Experiments and Observations.
- 149 Keill's Introduction to Natural Philosophy.
- 150 Mac-Laurin's Account of Sir Isaac Newton's Philosophical Discoveries.

- 151 Mariette's Treatise of Hydrostatics, by *Desaguliers*.
- 152 Martin's Optics.
- 153 ——— Philosophical Grammar.
- 154 ——— Philosophia Britannica, or a new and comprehensive System of the Newtonian Philosophy, Astronomy, and Geography, in a Course of 12 Lectures, 2 vol.
- 155 Martin's and Chambers's Abridgment of the Philosophical History and Memoirs of the Royal Academy of Sciences at Paris, 5 vol.
- 156 Maupertius's Figure of the Earth determined from Observation, by order of the French King.
- 157 Muschenbroek's Elements of Natural Philosophy, by *Celon*, 2 vol.
- 158 Newton's (Sir Isaac) Mathematical Principles of Natural Philosophy, by *Motte*, 2 vol.
- 159 ——— Optics; or a Treatise of Reflections, Refractions, Inflections, and Colours of Light.
- 160 Noller's (Abbe) Lectures on Experimental Philosophy.
- 161 Patoun's compleat Treatise of practical Navigation.
- 162 Robertson's Elements of Navigation, 2 vol.
- 163 Robins on Gunnery.
- 164 Rohault's System of Natural Philosophy, with Dr. *Clark*'s Notes, 2 vol.
- 165 Rowning's compendious System of Natural Philosophy, 2 vol.
- 166 Voltaire's Elements of Sir Isaac Newton's Philosophy, revised by *Hanna*.
- 167 Watson's Experiments and Observations on the Nature and Properties of Electricity.
- 168 Wilkins's Mathematical and Philosophical Works.
- 169 Wilson's Treatise of Electricity.

- 170 Worster's Principles of Natural Philosophy.
171 Whytt's Physiological Essays.

XVII. ARITHMETIC.

Quarto.

- 172 De Moivre's Doctrine of Chances, or a Method of calculating the Probability of Events in Play.
173 Dodson's Calculator; being correct Tables for Computation adapted to Science, Business and Pleasure.
174 Gardiner's Table of Logarithms for all Numbers from 1 to 102100; and for the Sines and Tangents to every ten Seconds of each Degree in the Quadrant; as also for the Sines of the first 72 Minutes to every single Second.
175 ———— Valuation of Annuities of Lives.
——— Doctrine of Fluxions, founded on Sir Isaac Newton's Method, published by himself in his Tract upon the Quadrature of Curves.
176 Mac-Laurin's Treatise of Fluxions, 2 vol.
177 Malcolm's System of Arithmetic Theoretical and Practical.
178 Newton's (Sir Isaac) Method of Fluxions and infinite Series.
179 Sanderfon's Algebra, 2 vol.

Octavo.

- 180 De Moivre's Annuities on Lives.
181 Hammond's Elements of Algebra.
182 Haye's Negociator's Magazine of Monies and Exchanges.
183 ——— Young Merchant's Assistant; or his Business at the Custom-House made easy.
184 Hill's Arithmetic.
185 Mac-Laurin's Treatise of Algebra.
186 Mair's Treatise on Book-keeping.
187 Malcolm on Book-keeping.
188 Martin's Logarithms.

240 *A Catalogue of Books,*

- 189 Martin's Decimal Arithmetic.
- 190 Newton's (Sir Isaac) universal Arithmetic;
with Dr. Halley's Method of finding the Roots
of Equations arithmetically.
- 191 Simpson's Treatise of Algebra.
- 192 ——— Doctrine and Application of Fluxions,
2 vol.
- 193 Ward's Compendium of Algebra.
- 194 ——— Mathematics.

XVIII. GEOMETRY.

Quarto.

- 195 Jesuit's Perspective, Englished by *Chambers*.
- 196 Newton's (Sir Isaac) two Treatises of the Qua-
drature of Curves and Analysis, by Equations of
an infinite Number of Terms ; with a large Com-
mentary, by Stewart.
- 197 Sharp's Geometry improved.
- 198 Simson's Elements of Euclid.

Octavo.

- 199 Barrow's Elements of Euclid.
- 200 Cun's Elements of Euclid.
- 201 De Chale's Elements of Euclid.
- 202 Gregory's Treatise of practical Geometry.
- 203 Hauxley's Navigation unveil'd ; or a new and
compleat System of Navigation, 2 vol.
- 204 Hawney's Doctrine of plain and spherical Tri-
gonometry.
- 205 ——— Measuring.
- 206 Heynes's Trigonometry.
- 207 Jones's Synopsis Palmariorum Matheseos ; or
a new Introduction to the Mathematics.
- 208 Leybourn's Dialling ; improved by *Wilson*.
- 209 Mandey's Mathematics.
- 210 ——— on Measuring.
- 211 Muller's Attack and Defence of fortified Places.
- 212 ——— Elements of Mathematics.

- 213 Muller's Treatise of Fortification.
 214 Ozanam's Course of Mathematics, 5 vol.
 215 Patoun's compleat Treatise of Navigation.
 216 Robertfon's compleat Treatise of Mensuration.
 217 ——— Elements of Navigation, 2 vol.
 218 ——— Treatise of such Mathematical Instruments as are usually put into a portable Case.
 219 Sherwin's Mathematical Table.
 220 Simpson's Elements of plane Geometry.
 221 Stone's Mathematical Dictionary.
 222 Turner's Mathematical Miscellanies.
 223 Vauban's Method of Fortification.
 224 Ward's young Mathematician's Companion.
 225 Webster's compendious Course of practical Mathematics, 3 vol.
 226 ——— Description and Use of a Sett, or Case of Pocket-Instruments.
 227 Wells's Art of Shadows.
 228 ——— young Gentleman's Mathematics, 3 vol.
 229 Wilson's Trigonometry; with the Doctrine of the Sphere, plain Dialling and Spheric Geometry.
 230 Witty's Treatise of the Sphere.
 231 Wyld's Practical Surveyor; or the Art of Land-Measuring made easy.

XIX. M U S I C.

- 232 Brossard's Musical Dictionary.
 233 Graffineau's Musical Dictionary.
 234 Malcolm on Music, speculative, practical, and historical.
 235 Smith's Harmonics, or the Philosophy of artificial Sounds.

XX. B O T A N Y.

Folio.

- 236 Grew's Anatomy of Plants, with an Idea of
a philosophical History of Plants.
237 Hill's History of Plants.
238 Miller's Gardener's Dictionary.

Octavo.

- 239 Tournefort's compleat Herbal.
240 Bradley's Botanical Dictionary.

XXI. P H A R M A C Y.

Folio.

- 241 James's Medicinal Dictionary, 3 vol.

Quarto.

- 242 Hill's History of the Materia Medica.

Octavo.

- 243 Alleyne's New English Dispensatory.
244 Banyer's Hospital Dispensatory.
245 Boerhaave's Materia Medica.
246 ———— Treatise on the Power of Medicines
by *Martin*.
247 Brookes's General Dispensatory.
248 Eyre's Account of the Mineral Waters of Spaw
in Germany, and Hotwell Waters.
249 Fuller's Pharmacopœia Extemporanea ; or,
Body of Medicines.
250 Geoffroy's Treatise of Fossil, Vegetable, and
Animal Substances that are made use of in Physic.
251 James's Dispensatory.
252 Lewis's New Dispensatory.
253 Mead's Mechanical Account of Poisons.
254 Pemberton's Dispensatory of the College of
Physicians.
255 Quincy's Dispensatory.
256 Shaw's Edinburgh Dispensatory.

On the Arts and Sciences. 243

- 257 Short's *Medicina Britannica* ; or a Treatise of such physical Plants as are generally found in the Fields or Gardens in Great-Britain.

XXII. C H E M I S T R Y.

Folio.

- 258 Glauber's Chemical Works.

Quarto.

- 259 Boerhaave's History, Theory, and Practice of Chemistry, by *Shaw*, 2 vol.

Octavo.

- 260 Friend's Chemical Lectures.

- 261 Lewis's Elements of Chemistry.

- 262 Shaw's Philosophical Principles of Chemistry.

- 263 Stahl's Philosophical Principles of universal Chemistry, by *Shaw*.

XXIII. A N A T O M Y.

Quarto.

- 264 Winslow's anatomical Exposition of the Structure of the human Body, by *Douglas*, 2 vol.

Octavo.

- 265 Cheselden's Anatomy.

- 266 Cowper on the Muscles ; wherein the true Uses of the Muscles are explained.

- 267 Dionis's Anatomy.

- 268 Douglas on the Muscles.

- 269 Drake's Anatomy of human Bodies, 3 vol.

- 270 Haller's Physiology ; being a Course of Lectures upon the visceral Anatomy and vital Œconomy of human Bodies.

- 271 — — Dissertation on the sensible and irritable Parts of Animals.

- 272 Heister's Compendium of Anatomy.

- 273 Keill's Anatomy of the human Body.

- 274 — — Essays on the several Parts of the animal Œconomy, and statical Observations.

244

A Catalogue of Books,

275 Monro's Anatomy of the human Bones.

276 Ridley's Anatomy of the Brain.

277 Thomson's Anatomy of the human
with an Account of muscular Motion.

278 ——— Art of dissecting the human B

279 Whytt's Essay on vital and other involu
Motions.

XXIV. P H Y S I C.

Folio.

280 James's Medicinal Dictionary, 3 vol.

Octavo.

281 Allen's Synopsis ; or compleat Practi
Physic, 2 vol.

282 Alpinus's Passages of Life and Death, by J
2 vol.

283 Andree's Cases of the Epilepsy, Hysteric
and St. Vitus's Dance, with the Process
Cure.

284 Andry's Orthopædia ; or the Art of co
ing and preventing Deformities in Children,

285 Arbuthnot's Essay upon the Nature of
ments, with practical Rules of Diet.

286 Armstrong's Synopsis ; or the History
Cure of the Venereal Disease.

287 Astruc's Academical Lectures on Fevers.

288 ——— on the Diseases of Women with

289 ——— General and compleat Treatise
the Disorders incident to Children, from
Birth to the Age of Fifteen.

290 ——— on the Venereal Disease.

291 Baglivi's Practice of Physic ; with his A
of the Tarantula.

292 Bellinger's Treatise concerning the Nu
of the Foetus in the Womb.

293 Berkely's Siris; being Inquiries concerni
Virtues of Tar-Water; Hale's Experi
Tar-Water; Prior's Narrative of the Suc
Tar-Water.

- 83 Atkin's Navy Surgeon, or practical System of Surgery.
- 84 Boulton's System of rational Surgery.
- 85 Daran's Chirurgical Operations on the Disorders of the Urethra, by *Tomkyns*.
- 86 Daventer's Midwifry.
- 87 Dionis's Course of Chirurgical Operations, demonstrated in the Royal Garden at Paris.
- 88 Exton's new General System of Midwifry.
- 89 Garengot's Treatise of Chirurgical Operations.
- 90 Giffard's Cases in Midwifry.
- 91 Houston's History of Ruptures and Rupture-Curers, &c.
- 92 La Motte's Treatise of Midwifry.
- 93 Le Clerc's compleat Surgeon; or the whole Art of Surgery explained in a familiar Manner.
- 94 Le Dran's Observations in Surgery.
- 95 ——— Operations in Surgery.
- 96 Mihles's Elements of Surgery adapted to the Use of the Camp and Navy, as well as of the domestic Surgeon.
- 97 Ranby on Gun-shot Wounds.
- 98 Ruysch's practical Observations in Surgery and Midwifry.
- 99 Sharp's critical Enquiry into the present State of Surgery.
- 100 ——— Midwifry.
- 101 ——— Treatise on the Operations in Surgery.
- 102 Smellie's Observations and Cases in Surgery.
- 103 ——— Treatise on the Theory and Practice of Midwifry.
- 104 Smith's Principles of Surgery.
- 105 Turner's Surgery, 2 vol.
- 106 Warner's Cases in Surgery, with Remarks; with

- 244 *A Catalogue of Books,*
 275 Monro's Anatomy of the human Bones.
 276 Ridley's Anatomy of the Brain.
 277 Thomson's Anatomy of the human Body
 with an Account of muscular Motion.
 278 ——— Art of dissecting the human Body.
 279 Whytt's Essay on vital and other involuntary
 Motions.

XXIV. P H Y S I C.

Folio.

- 280 James's Medicinal Dictionary, 3 vol.

Octavo.

- 281 Allen's Synopsis ; or compleat Practise of
 Physic, 2 vol.
 282 Alpinus's Passages of Life and Death, by J.
 2 vol.
 283 Andree's Cases of the Epilepsy, Hyfteric
 and St. Vitus's Dance, with the Process and
 Cure.
 284 Andry's Orthopædia ; or the Art of curing
 and preventing Deformities in Children, 2
 285 Arbuthnot's Essay upon the Nature of
 Humours, with practical Rules of Diet.
 286 Armstrong's Synopsis ; or the History and
 Cure of the Venereal Disease.
 287 Astruc's Academical Lectures on Fevers.
 288 ——— on the Diseases of Women with
 289 ——— General and compleat Treatise
 of the Disorders incident to Children, from
 Birth to the Age of Fifteen.
 290 ——— on the Venereal Disease.
 291 Baglivi's Practice of Physic ; with his Account
 of the Tarantula.
 292 Bellinger's Treatise concerning the Nature
 of the Foetus in the Womb.
 293 Berkely's Siris; being Inquiries concerning the
 Virtues of Tar-Water ; Hale's Experiments on
 Tar-Water ; Prior's Narrative of the Success of
 Tar-Water.

- Bones.
- human Bones.
- on.
- human Body
- er involun
- vol.
- Practice
- th, by Jan
- Hysteric F
- Process a
- of corre
- ldren, 2 vo
- ture of A
- History a
- evers.
- with Chi
- eatise of
- from the
- is Accou
- e Nutritio
- cerning th
- riments o
- Success
- 83 Atkin's Navy Surgeon, or practical System of Surgery.
- 84 Boulton's System of rational Surgery.
- 85 Daran's Chirurgical Operations on the Disorders of the Urethra, by *Tomkyns*.
- 86 Daventer's Midwifry.
- 87 Dionis's Course of Chirurgical Operations, demonstrated in the Royal Garden at Paris.
- 88 Exton's new General System of Midwifry.
- 89 Garengeot's Treatise of Chirurgical Operations.
- 90 Giffard's Cases in Midwifry.
- 91 Houston's History of Ruptures and Rupture-Curers, &c.
- 92 La Motte's Treatise of Midwifry.
- 93 Le Clerc's compleat Surgeon; or the whole Art of Surgery explained in a familiar Manner.
- 94 Le Dran's Observations in Surgery.
- 95 ——— Operations in Surgery.
- 96 Mihles's Elements of Surgery adapted to the Use of the Camp and Navy, as well as of the domestic Surgeon.
- 97 Ranby on Gun-shot Wounds.
- 98 Ruysch's practical Observations in Surgery and Midwifry.
- 99 Sharp's critical Enquiry into the present State of Surgery.
- 100 ——— Midwifry.
- 101 ——— Treatise on the Operations in Surgery.
- 102 Smellie's Observations and Cases in Surgery.
- 103 ——— Treatise on the Theory and Practice of Midwifry.
- 104 Smith's Principles of Surgery.
- 105 Turner's Surgery, 2 vol.
- 106 Warner's Cases in Surgery, with Remarks ; with

250

A Catalogue of Books,

with an Account of the Effects of the Agaric of the Oak in stopping of Bleedings.

407 Wiseman's Surgery, 2 vol.

XXVI. JURISPRUDENCE.

Folio.

408 Hobbes's Leviathan; or the Matter, Form and Power of a Commonwealth, ecclesiastical and civil.

409 Jacob's Law Dictionary.

410 Puffendorf's Law of Nature and Nations, with the Notes of Barbeyrac.

411 Wood's Institutes of the Law of England.

Octavo.

412 Chamberlayne's present State of Great Britain; with divers Remarks upon the ancient State thereof.

413 Locke on Government.

414 Sidney's Discourses concerning Government.

XXVII. HERALDRY.

Folio.

415 Guillim's Display of Heraldry.

Octavo.

416 The British Compendium; or Rudiments of Honour; containing the Genealogies of all the Nobility of England, their Titles, Posts, and Seats. Also their Coronation Robes; with their Arms, Crests, Supporters, and Mottoes, 2 vol.

- 417 The Scotch Compendium ; containing the Origin of the Scots, and Succession of their Kings. Also the Titles, Descents, Marriages, Posts, Seats, &c. of the Scottish Nobility ; with their Arms, Crests, &c.
- 418 The Irish Compendium ; containing the Descents, Marriages, Issues, Titles, Posts, and Seats of the Nobility of Ireland ; with their Arms, Crests, &c.
- 419 Coates's Dictionary of Heraldry.
- 420 Kent's Grammar of Heraldry.

DICTIONARIES, &c. of Arts and Sciences.

Folio.

- 421 Chambers's Dictionary of Arts and Sciences, &c. with a Supplement, 4 vol.

Octavo.

- 422 New and Complete Dictionary of Arts and Sciences ; comprehending all the Branches of useful Knowledge ; with accurate Descriptions as well of the various Machines, Instruments, Tools, Figures and Schemes necessary for illustrating them, as of the Classes, Kinds, Preparations, and Uses of natural Productions, whether Animals, Vegetables, Minerals, Fossils, or Fluids ; together with the Kingdoms, Provinces, Cities, Towns, and other remarkable Places throughout the World. Illustrated with above three hundred Copper-Plates : By a Society of Gentlemen, 4 vol.
- 423 Dictionarium Polygraphicum ; or the whole Body of Arts regularly digested, 2 vol.

252 *A Catalogue of Books on the Arts &c.*

424 Martin's Philological Library of Literary Arts and Sciences.

425 Preceptor ; containing a general Course of Education, wherein the first Principles of polite Learning are laid down in a way most suitable for trying the Genius and advancing the Instruction of Youth, 2 vol.

426 Rollin's History of the Arts and Sciences of the Ancients, 4 vol.

427 Smith's Laboratory or School of Arts, 2 vol.

☞ Any of the Books mentioned in this Catalogue, or any other Book, in whatever Language, may be had, upon a short Notice, of W. OWEN Bookseller at Homer's Head in Fleet-street.

By whom is published Monthly, Price 6d.

The GENERAL MAGAZINE of ARTS and SCIENCES, Philosophical, Philological, Mathematical and Mechanical.

By BENJAMIN MARTIN,

f.
Arts
e of
po-
most
the
s of
l.

gue,
may
ok-

d.
ad
nem-

kg
24-

2x11 3/4 x 26 1/2
of 6 1/2 x 2 x 1/2
J. H. M. 2 x 1/2
1/2 x 1/2 x 1/2

Mr. Pearce 1852